

# Bill 25 (2019) Testimony

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 9:53 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Nicole Chatterson  
Phone 8085617730  
Email oahu.zerowaste@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25 CD2 (Elefante)  
Your position on the matter Support  
Representing Organization  
Organization Zero Waste O'ahu  
Do you wish to speak at the hearing? No

Aloha Chair Menor and Committee Members,

It is crucial that we continue support infrastructure that will allow our residents to seamlessly use solar and electric vehicles. When consumers purchase these items they are spending their hard earned dollars to try and to the right thing--to try and help Hawai'i reach our goal of reducing our carbon footprint.

Written  
Testimony

Make this easy for them. As a new owner of an EV I have become acutely aware of our infrastructure needs. Let's do our part and ask our developers to make homes that are ready to link up to a cleaner system.

Aloha,  
Nicole  
Director, Zero Waste O'ahu

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



"Advancing the Commercial Property Management Industry through Education, Networking and Advocacy"

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Testimony to the  
Honolulu City Council

10:00 a.m., January 23, 2020

RE: Bill 25 Relating to Adoption of the State Energy Conservation Code

Aloha Chair Menor, Vice Chair Waters, and members of the Committee:

We are testifying on behalf of the Building Owners and Managers Association of Hawaii, a trade organization focused on actively and responsibly representing the commercial real estate industry through the collection, analysis and communication of information and through professional development. BOMA Hawaii is a leader in promoting energy efficient buildings and strongly supports energy efficient alternatives transportation.

It has been estimated that more than 500,000 electric vehicles are now on the road in the United States, and this is only expected to grow. As plug-in cars have become more visible on the nation's highways and local streets, there has also been a corresponding need for electric vehicle charging stations. This emerging need is creating a marketplace demand. Many building owners have installed EV charging stations and have successfully used them as a profit center as well as an amenity to attract new business and/or new tenants. Others are reluctant to take on the cost (installation cost, lost revenue from lost parking spaces, etc.), ongoing maintenance and management responsibilities, and liability. Where building owners can balance the benefits and potential draw backs, and where it makes economic sense, we believe that property owners will move forward to meet the need, without federal, state or local mandates.

We want to contribute positively to the discussion about promoting and incentivizing the construction of parking stations ready to be equipped with electric vehicle charging stations. We look forward to serving as a resource to the Council's subject matter committees on this bill and appreciate the opportunity to testify.



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • [info@350Hawaii.org](mailto:info@350Hawaii.org)

To: The Committee on Zoning, Planning and Housing

From: Brodie Lockard, Founder, 350Hawaii.org

Date: Thursday, January 23, 2020

**In strong support of Bill 25, CD2 (Elefante version)**

Dear Chair Menor, Vice Chair Waters, and Members of the Zoning, Planning and Housing Committee,

350Hawaii.org writes in strong support of Bill 25, CD2, as introduced by Councilmember Elefante. However, we do not support the points-based electric vehicle readiness compliance path in the proposed C406.8.2. It avoids the EV readiness we really need. Stop delaying the future!

In addition, we ask you to raise the EV-ready parking stall amount from 25% to 100%. Vancouver's requirement is already 100%.

**1. Solar Water Heater Requirements**

350Hawaii supports renumbered item (33) in CD2.

We ask you to reject self-serving, spurious arguments like, "People should have 'a choice' of a gas water heater," and "Solar water heaters make affordable housing unaffordable."

With or without Bill 25, very few **homeowners** will have a choice of water heater type. Developers nearly always choose the type of water heater, not homeowners. And to save money in the short term, developers usually choose gas. In the long term, homeowners and renters must use what's there. Traditional water heating consumes almost 20% of a household budget. The sun is free.

If actually given a choice, and all the facts, the vast majority of homeowners would choose solar water heating, because it's far cheaper in the long term. To give homeowners that benefit, developers need an ordinance, or they will base their choice on money alone.

Also, letting anyone choose natural gas is not pono. Gas water heaters contribute heavily to the Climate Crisis, which is clearly affecting all of us. No one has a right to "choose" for the rest of us. It's like "choosing" to blast heavy metal music at 3 a.m., or "choosing" to drive on the left. The same goes for people who prefer gas cooking. Hawaii has decided that we should give up the **choice** of plastic bags, because that tiny imposition on individuals benefits us significantly as a society. And gas is far more important.

As for affordable housing, Bill 25's requirements will indeed increase costs **for three to four years** while the solar water installation is being paid off, but then that affordable housing will become **even more affordable**, because there will **never** be a gas bill.

Finally, Hawaii Gas argues that requiring solar water heaters will cost workers' jobs. But Bill 25

applies only to **new** buildings. If someone has a job in the gas industry now, they will still have it after Bill 25, serving every existing gas customer.

## **2. Percentage of Parking Stalls**

We ask you to raise the EV-ready parking stall amount in item 17 from 25% to 100%. Vancouver's requirement is 100%. In the next few years, 25% will already be inadequate. Let's not go through this again then.

A Vancouver, BC bylaw that took effect on January 1, 2019 requires developers to not just make the parking stalls of new multi-unit residential buildings EV-ready, but to **actually install electric vehicle chargers in every stall** [1].

Vancouver also began with a low percentage of EV-ready stalls, but only nine years later realized they had aimed far too low.

Their new requirement modifies a 2009-approved policy that mandates chargers for 20% of the parking stalls in new multi-unit residential buildings, 10% in new commercial buildings, and each garage or carport for a single-family attached and detached residence.

Even earlier, in December 2017, the Richmond, BC City Council began requiring that all new residential parking spaces include an outlet capable of Level 2 EV charging [2].

## **3. Level 2 EV Charging**

350Hawaii supports CD2's change to all Level 2 EV-readiness. Level 2 is fast becoming the standard nationwide, because it is several times faster, making EVs far more convenient and practical for homeowners and renters in a wide variety of situations. "Range anxiety" (fear one's battery won't last to the next charging station) should not prevent people from switching to an EV, which nearly everyone in Hawaii must eventually do.

EVs are coming fast and hard. Volkswagen says it will stop making gas-powered cars entirely in 2026 [3]. Mercedes-Benz, Volvo, and Jaguar Land Rover will change their entire vehicle lines to EVs and EV hybrids by 2022. GM will drop all their gas-powered vehicles by an unspecified date. Ford, Toyota, Mazda, and the Renault-Nissan-Mitsubishi alliance are all spending billions on EV technology, and will each introduce from 10 to 50 new EV models within the next one to seven years [4].

The need for more EV charging stations on Oahu is glaring. The easiest and cheapest place to add them is in new building construction. The easiest place to use them is at home.

Level 1 charging is distressingly inadequate for the many drivers who would like to use an EV daily for a long commute. Level 1 provides only about four miles of driving range per hour of charging. That severely limits range, to perhaps 50 miles, depending on the specific car. And if you go anywhere after work, you lose both voltage and charging time. Level 2 charges three to four times as fast, and according to Tesla, who would know, Level 2 costs only a few hundred dollars more to install during construction than Level 1. Compared to other looming climate-related costs, this is miniscule.

Volvo found in February that 51% of EV drivers charge their cars at home; only 16% charge at work [5]. Nearly every Hawaii driver will eventually have an EV and need somewhere to charge it. Will they be forced to somehow pay to install the electrical equipment needed to charge at home? How will they afford that?

Volvo also found that **slow Level 1 charging is keeping people from buying EVs**. Fifty-eight percent of consumers have avoided buying one because of range anxiety [5]. It's the primary reason people aren't buying EVs. Too few charging stations is second, at 49%.

If most people charge at home (51%, recall) and they're afraid their Level 1 charging can't get them safely through their day, they're not going to buy an EV. Range anxiety is a major barrier to large scale adoption of EVs [6][7]. Hawaii's clean energy goals demand that we adopt EVs heavily and quickly, and Level 1 is not sufficient.

When people experience Level 1's delays, many will want Level 2, costing them

unnecessary money and trouble to upgrade themselves.

Level 2's faster charging will have another very important benefit: charging is more likely to be mostly completed during daylight hours, increasing the percentage of solar energy used for charging.

Jurisdictions across the U.S. are already standardizing building requirements to Level 2 in recognition of Level 1's limitations. Hawaii should be leading this trend, not playing catch-up.

Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EVs they will be driving in the 2020s or 2030s.

Items 17, 28 and 31 in Bill 25 will accomplish three important things:

**1. Lower the cost of living for long-term Hawaii residents.** Paying a permanent monthly bill for natural gas to heat water in sunny Hawaii is just silly. Solar water heating pays for itself in three or four years, and residents don't have a monthly gas bill. Ever. An electric water heater accounts for over 25% of the average electric bill. The sun is free.

Electric vehicles (EVs) will replace gas cars before long. Hawaii residents will need some way to charge at home. How will they afford to install the electrical equipment needed for that? Installing it is far less expensive during construction. Don't force new homeowners to spend thousands of dollars to retrofit their homes for the EV they will be driving within the next decade or two.

**2. Help to fight our climate crisis.** Those who want a choice of gas water heating should consider that the methane they would burn affects all of us. Their kokua is not just appreciated, it's essential.

Hawaii needs to adopt EVs widely and quickly if we hope to meet our clean energy goals. The top two reasons people don't buy an EV right now are range anxiety, and too few charging stations in general [5]. Remove these barriers, and people will adopt. Cutting our greenhouse gas emissions depends on it.

**3. Show some leadership!** We're all very proud to be the first state to commit to 100% clean energy, but what progress have we made? The Federal government is in love with coal. The Hawaii legislature did very close to nothing this year.

That leaves **you**, Councilmembers. Are we all waiting for a giant hurricane to wipe out Waikiki? Are you waiting for Kam Highway to fall into the ocean completely? We know now that clean energy by 2045 is too little, too late, and it's past time to move the goal up. Way up.

You, and state lawmakers, are supposed to write laws to help protect us from sea level rise, catastrophic hurricanes, and rain bombs. This bill, and stronger amendments, deserve support from anyone with the least concern about climate change, or about saving consumers money.

Here's your chance to set an example. Take it!

Brodie Lockard  
Founder, 350Hawaii.org

[1] <https://dailyhive.com/vancouver/electric-vehicle-chargers-residential-buildings-vancouver-2018>

[2] <https://www.richmond.ca/sustainability/energysrvs/electricvehiclecharge.htm>

[3] <https://fortune.com/2018/12/05/volkswagen-ending-gas-powered-cars/>

[4] <https://mashable.com/2017/10/03/electric-car-development-plans-ford-gm/>

[5] <https://www.media.volvocars.com/us/en-us/media/pressreleases/248305/poll-finds-americans-feel-electric-vehicles-are-the-future-of-driving>

[6]

<https://www.researchgate.net/publication/224880220> Sustainable transportation based on electric vehicle concepts a brief overview

[7] <http://www.innovations.harvard.edu/cache/documents/11089/1108934.pdf>

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 12:11 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony  
**Attachments:** 20200123001101\_Testimony\_\_Bill\_25.pdf

## Speaker Registration/Testimony

Name	Amber Stone Napoleon
Phone	808-620-7265
Email	amber@alohacharge.come
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Organization
Organization	Aloha Charge
Do you wish to speak at the hearing?	Yes
Written Testimony	
Testimony Attachment	20200123001101_Testimony__Bill_25.pdf
Accept Terms and Agreement	1

IP: 192.168.200.67



Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of Vancouver. This will help to "future-proof" new construction and accelerate our clean transportation future.

As VP of Business Development for Aloha Charge, Hawaii's leading expert in EV Charging, I can attest to the fact that Infrastructure upgrade costs are the number one reason that EV Charging station installation projects are stalled or do not happen at all. On top of that, I can also attest to the fact that it is proven that it will cost approximately 91% to retrofit EV Infrastructure post-construction. While many new developments may oppose this Bill or 100% of new parking stalls be wired for Level 2 charging capacity, I like to compare it to data cables from about 30 years ago. Many new builds did not see the need to spend additional funding on data cables, and this caused exorbitant post-construction infrastructure costs to retrofit buildings with data. On the flip side of that, the buildings that DID include data in construction build... were patting themselves on the back 5 years down the line for being so forward thinking. I truly believe we will see the same scenario here. Three years down the line the developers will have no problem taking credit for the 'great decision' they made to prewire their buildings. Cars ARE becoming electric. Mercedes just announced that they are stopping the development of combustion engines and the last one they will sell will be in 2039. Every car manufacturer has at least one EV. This is the trend of the entire industry... and we can be prepared for it... or continue to play catch up costing MILLIONS if not BILLIONS of public and private money down the road.

To speak specifically to the points system as it relates to Levels of charging stations I think it is important to note that commercial units are all now at least 30-32 amps, unless they power share.

One important reason for this is that all cars come with a plug so there is no demand for a 16amp commercial unit.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

# Hawai'i Construction Alliance

P.O. Box 17944  
Honolulu, HI 96817  
(808) 220-8892

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January 23, 2020

The Honorable Ron Menor, Chair  
The Honorable Tommy Waters, Vice Chair  
and Members  
Honolulu City Council Zoning, Planning Housing Committee  
530 South King Street, Room 202  
Honolulu, Hawai'i 96813

**RE: SUPPORT for BILL 25 Proposed CD2 (2019) – RELATING TO THE ADOPTION  
OF THE STATE ENERGY CONSERVATION CODE**

Dear Chair Menor, Vice Chair Waters, and members:

The Hawai'i Construction Alliance is comprised of the Hawai'i Regional Council of Carpenters; the Operative Plasterers' and Cement Masons' Union, Local 630; International Union of Bricklayers & Allied Craftworkers, Local 1; the Laborers' International Union of North America, Local 368; and the Operating Engineers, Local Union No. 3. Together, the member unions of the Hawai'i Construction Alliance represent 15,000 working men and women in the basic crafts of Hawai'i's construction industry.

We are encouraged to see that in Sec. 32-1.1 (17) in Councilwoman Kobayashi's proposed CD 2 in there is an exception of the Electrical Vehicle Infrastructure for all affordable housing units at or below 140% AMI.

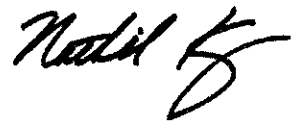
Honolulu already has one of the highest median home sales prices in the entire country, and even the slightest increase in the price of a unit will stop an affordable development from even being planned, much less built.

We believe the affordable housing exemption should apply to ALL changes to the existing energy code to spur the development of more housing units in this critical period.

We are well aware of the risk that climate change poses to Honolulu, but the staggering lack of affordable housing has reached a crisis that needs to be addressed immediately.

Therefore, we request your committee amend Bill 25 to exempt all affordable housing at, or below, 140% AMI.

Mahalo,

A handwritten signature in black ink, appearing to read "Nathaniel Kinney". The signature is fluid and cursive, with a large, stylized "K" at the end.

Nathaniel Kinney  
Executive Director  
Hawai'i Construction Alliance  
[execdir@hawaiiconstructionalliance.org](mailto:execdir@hawaiiconstructionalliance.org)



## ELEMENTAL EXCELERATOR

Written Statement of Elemental Excelerator  
before the Honolulu City Council Committee on Zoning, Planning, and Housing  
Thursday, January 23, 2020

### In Consideration of Bill 25 Relating to the Adoption of the State Energy Conservation Code

Aloha Chair Menor, Vice-Chair Waters, and Members of the Committee on Zoning, Planning, and Housing:

Elemental Excelerator respectfully submits support for Bill 25, which regulates the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to local amendments by the City and County of Honolulu.

Bill 25 aligns with a letter we sent in collaboration with the Distributed Energy Resources Council of Hawai'i, Hawai'i Solar Energy Association, Hawai'i Energy, Blue Planet Foundation, and Ulupono Initiative to the City & County of Honolulu Department of Planning and Permitting on October 2017. In that letter, we requested amending the 2014 National Electric Code to add Article 706 "Energy Storage Systems" of the 2017 NEC.

Elemental Excelerator is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over \$30 million to 99 companies resulting in over 50 demonstration projects in Hawai'i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to \$1 million.

In April 2018, Elemental Excelerator commissioned a study entitled *Transcending Oil: Hawai'i's Path to a Clean Energy Economy*. The study found that in Hawai'i, transitioning to renewable energy is cheaper than sticking with oil. The faster we go, the cheaper it will be. As a policy recommendation, the study identified following through and enforcing current clean energy policies by fully funding and implementing building codes and standards. The report also found that "*Energy efficiency efforts increased over the past decade, led by Hawaii Energy's electric savings programs and a push to update building codes.*"<sup>1</sup>

**We support Bill 25 for the following reasons:**

1. **It is economically responsible:** According to a report by the National Institute of Building Sciences, for every \$1 invested in updating building codes, it yields an \$11 benefit.

<sup>1</sup> Larsen, J., Mohan, S., Herndon, W., Marsters, P., & Pitt, H. (2018, May 01). *Transcending Oil: Hawai'i's Path to a Clean Energy Economy*, p.13 and 37, Retrieved from <https://rhg.com/research/transcending-oil-hawaiis-path-to-a-clean-energy-economy/>  
<sup>2</sup> <https://www.nibs.org/news/432994/National-Institute-of-Building-Sciences-Issues-Interim-Report-on-the-Value-of-Mitigation-.htm>



## ELEMENTAL EXCELERATOR

Attention Kathy Sokugawa  
City & County of Honolulu  
Department of Planning & Permitting  
650 S. King Street  
Honolulu, HI 96813

October 5, 2017

Director Kathy Sokugawa,

We are encouraged by Hawaii's commitment to 100 percent clean electrical energy by 2045 as evidenced by the State and counties' vigilance in the adoption of the 2015 International Energy Conservation Code (IECC) to address efficiency and renewable energy at the parcel level. The recent adoption of the 2014 National Electrical Code on March 27, 2017, found in Title 3, Chapter 182.1 of the Hawaii Administrative Code, and the adoption of the 2015 IECC found in Title 3, Chapter 181.1 demonstrates your commitment to system-wide change. This letter requests amending the 2014 NEC to add Article 706 "Energy Storage Systems" of the 2017 NEC. These codes will usher in new safety and efficiency standards to pave the way to 100 percent clean energy.

Elemental Excelerator (EEx) facilitated two meetings between City & County of Honolulu Department of Planning & Permitting, the Distributed Resources Council (DERC) of Hawaii and the Hawaii Solar Industry Association (HSEA) on June 8, 2017 & June 19, 2017. The meetings focused on energy storage permitting, with a follow up meeting led by HSEA on August 29, 2017. These meetings resulted in three clear next steps:

- 1) Evaluating the amendment of the City's adoption of the 2014 NEC with Article 706 of the 2017 NEC "Energy Storage Systems".
- 2) Creating a checklist for energy storage permit submissions
- 3) Holding quarterly meetings convened by HSEA & DERC

Subsequent to meeting with DPP, DERC, and HSEA, EEx reached out to the following State and National stakeholders:

**Hawaii State Building Code Council:** EEx provided public testimony at the Hawaii State Building Code Council meetings on August 15, 2017 and September 19, 2017 to socialize the idea of amending the 2014 NEC with Article 706 of the 2017 NEC. Attendees expressed their support.



# LiUNA!

## HAWAII LABORERS UNION (LIUNA) LOCAL 368

**PETER A. GANABAN**  
*Business Manager/  
Secretary-Treasurer*

**ALFONSO OLIVER**  
*President*

**JOBY NORTH II**  
*Vice President*

**TONI FIGUEROA**  
*Recording Secretary*

**JAMES DRUMGOLD JR.**  
*Executive Board*

**ORLANDO PAESTE**  
*Executive Board*

**JOSEPH YAW**  
*Executive Board*

**MARTIN ARANAYDO**  
*Auditor*

**RUSSELL NAPIHA'A**  
*Auditor*

**MARK TRAVALINO**  
*Auditor*

**ALFRED HUFANA JR.**  
*Sergeant-At-Arms*

Hearing: Committee on Zoning and Housing  
Date: January 22, 2020  
Place: Committee Meeting Room  
Time: 10:00 a.m.

### RE: BILL 25 (2019), CD1 – RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE

Aloha Chair Menor, Vice-Chair Waters, and committee members,

My name is Ryan K. Kobayashi, Government and Community Relations Director for the Hawaii Laborers Union Local 368. The Hawaii Laborers Union (LiUNA), Local 368 is made up of over 5000 working and retired members across the State of Hawaii and we would like to take this opportunity to offer comments regarding Bill 25 Relating to the Adoption of the State Energy Conservation Code.

Thank you for the opportunity to submit written testimony on this issue. At this time, the Hawaii Laborers' Union, Local 368 would like to express **our strong support for the addition of masonry and concrete walls** to Hawaii island's adoption of the State Energy Conservation Code. We feel that such an addition would not only improve the code in the areas of energy conservation and efficiency, but in the areas of fire safety and cost effectiveness in Honolulu.

However, we have serious concerns regarding the cost impacts of other items included in this Bill which could severely impact the production of affordable housing in the County. Therefore, we would suggest an exempting all housing that falls into a 140% AMI and below category.

Thank you for the opportunity to submit written testimony on this matter.

LiUNA Local 368  
1617 Palama Street  
Honolulu, HI 96817  
Phone: (808) 841-5877  
Fax: (808) 847-7829  
[www.local368.org](http://www.local368.org)

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**Hawaii Solar Energy Association**  
*Serving Hawaii Since 1977*

**TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION  
IN REGARD TO BILL 25, RELATING TO THE ADOPTION OF THE STATE  
ENERGY CONSERVATION CODE  
BEFORE THE  
HONOLULU CITY COUNCIL  
ON  
WEDNESDAY, JANUARY 23, 2020**

Chair Menor, Vice-Chair Waters, and members of the Zoning, Planning, and Housing Committee, my name is Will Giese, and I am the Executive Director of the Hawaii Solar Energy Association, Inc. (HSEA).

The HSEA was founded in 1977 to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the Hawaiian Islands. Our membership includes the vast majority of locally owned and operated solar installers, contractors, distributors, manufacturers, and inspectors across all islands.

**HSEA SUPPORTS BILL 25.** This ordinance pertains to regulating the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to the local amendments within.

Bill 25 seeks to adopt the solar hot water variance into city ordinance, as well as include provisions that address a variety of energy efficient building design standards, and adopt provisions related to the use of electric vehicle charging stations in single and multi-family residences.

**COMMENTS RE: SOLAR HOT WATER**

On the solar water heating portion of this measure, both the legislature and the state's environmental court were clear in their understanding that renewable energy devices used to heat water are a boon for homeowners. Hawaii is a unique state, with a unique climate that makes it one of the most conducive states to technology like solar thermal heating. That is why Hawaii is the leading market for solar water heating sales in the entire United States.

Ten years ago, the state legislature enacted Act 204 and subsequently Act 155 requiring solar water heaters to be installed on all new single family homes. Act 204 of the 2008 regular legislative session<sup>1</sup> first established §196-6.5 as a means to encourage the adoption of inexpensive and energy efficient water heaters in new single-family home construction. Subsequently, in 2009 the legislature passed Act 155 which, specifically in

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<sup>1</sup> See Act 204 and Gov. Msg. No. 947 on June 26, 2008 during the twenty-fourth state legislature in the state of Hawai'i.





## Hawaii Solar Energy Association

*Serving Hawaii Since 1977*

Part VII, sought to clarify the administration of the Solar Hot Water Variance Law. Act 155 asserted that variances would be “rarely, if ever, exercised or granted because the burden of proof will lie with the applicant to demonstrate that a solar water heater system, regardless of location or circumstance, is not cost effective in the context of a thirty-year mortgage.”

This measure allows the City a means to enforce this state requirement by enshrining a similar requirement into ordinance. It **could go a step further** by requiring that this same standard apply to multi-family housing, which helps reduce the cost of housing for low and middle income communities. In the confines of a 20-30 year mortgage, the cost effectiveness and utility of a solar water heater has been proven time and again to be overwhelming worth it.

The HSEA also offers a point-by-point response to some of the questions regarding the impacts of this measure, in an effort to set the record straight:

- It is absolutely correct that a “one size” water heating solution does not sufficiently address the broad Hawaii water heating market. Bill 25 gives options to consumers for a wide variety of water heating technologies and allows the homeowner the agency to choose what is most cost-effective for their situation. In fact, section R403.5.5 specifically includes an exception section allowing other water heating technologies to be used when installation of solar hot water is impractical or cost prohibitive, consistent with state law.
- The City & County of Honolulu is not at odds with the state law and variance process, but rather Bill 25 actually serves to alleviate the county of potential liability by granting the Department of Planning and Permitting enforcement abilities over state mandated water heating variances. This power is currently absent from state law.
- Rural residents who depend on clean gas still can depend on gas. Further, to suggest alternate water heating technologies are less resilient and “more vulnerable to natural disasters” is paradoxical and has no factual basis. If the intent is to suggest electrical infrastructure is more vulnerable than gas infrastructure, any potential vulnerability would also impact gas heating technologies as all major manufacturers utilize electronic spark-to-pilot ignition systems in gas water heaters. No electrical grid = no gas heater ignition. Alternatively, solar water heaters with a direct-current circulation pump still provide hot water in the event of a grid outage. Additionally, unlike gas, solar water heaters also come with 80 – 120 gallon tanks, which function as a “battery” that stores hot water during power outages.



## **Hawaii Solar Energy Association**

*Serving Hawaii Since 1977*

- Future home buyers will never pay an amount over \$6,000 on average more in energy cost if their option is limited to solar. Solar energy input will never be more costly than gas energy input. Further, their option is not limited to solar. To suggest otherwise is purposefully misleading and ignores the very clear exception clause described in the first bullet point. Additionally, this point presupposes that only solar water heaters are an option, and that new home buyers will be paying *retail* prices, when in fact the cost of the heater will be rolled into the total cost of their home. Finally, unlike gas technology, a consumer utilizing most renewable energy water heating tech (solar thermal, heat pump, PV) does not also have to pay a gas bill, thus they save money over the life of the system.

### **COMENTS RE: EV CHARGING PULLOUTS**

Another part of this bill requires that electrical vehicle charging station pull outs are required in multi-family housing units. There are myriad benefits to electrifying transportation that drastically help the state lower its carbon emissions. By providing sufficient electric vehicle charging stations in multi-family housing, you allow the tenants of these housing units to realize the benefit and cost savings of an electric vehicle, while simultaneously reducing emissions from an ICE or carbon-based fuel burning vehicle by removing it from the road.

We do not currently support the language present in the CD2 draft of this bill and recommend that the Council adopt the previous draft with suggest amendments cited below. Currently, the CD2 draft relies on a point system that heavily favors level 3 charging stations, all of which are currently controlled by the electric utility. Although the HSEA supports development of Level 3 chargers along with Level 2 chargers, we believe that this point system will result in two negative outcomes:

1. **Developers will opt to install fewer EV chargers overall**, because they will receive compliance points that are 2X to 3X what a Level 2 charger will be, and there is no stop-gap to prevent customers from parking their car at a charger longer than it reasonably needed.
2. **The current compliance point discrepancy by charging level stifles market competition.** There are simply not enough suppliers or developers of Level 3 chargers to stimulate market competition that would drive down charging rates. The HSEA is also concerned that there are no price controls on HECO owned vehicle chargers, or no amendments that require a portion of all of the energy used to power these chargers be from renewable sources.

Relative to other jurisdictions that have considered adopting similar ordinances or statues, we suggest that the City consider amending Section (17), Subsection C 406.8 as follows:



## Hawaii Solar Energy Association

*Serving Hawaii Since 1977*

C406.8 **Electric vehicle infrastructure.** New residential multi-unit buildings that have eight or more parking stalls, and new buildings that have twelve or more parking stalls, shall be electric vehicle charger ready for at least ~~25~~ 100% percent of the parking stalls. As used in this section, "electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level ~~1~~ 2 charge per required parking stall for residential and multi-unit buildings. For commercial buildings, at least ~~25~~ 100% percent of the parking stalls are required to be AC Level 2 charger ready. Charge method electrical ratings are provided below:

**CHARGE METHODS ELECTRICAL RATING**

Charge Method	Normal Supply Voltage (Volts)	Maximum Current (Amps – Continuous)	Supply power
AC Level 1	120V AC, 1-phase 120V AC, 1-phase	12A 16A	120VAC/20A (12-16A continuous)
AC Level 2	208 to 240V AC, 1-phase	≤ 80A	208/240VAC/20-100A (16-80A continuous)

Requiring 100% Level 2 charging addresses several issues. By requiring 100% compliance, the City ensures that renters and LMI homeowners, who benefit the most from EV cost savings, will be guaranteed a charger whether or not they own the unit or domicile.

The cost to install new infrastructure over retrofits is significantly lower, as demonstrated in Hawaii's Solar Water Heating variance as well as California's New Solar Homes mandate, which lower the cost of installing each unit by 30-75%. Additionally, these costs will be rolled into the purchase prices of the home, rather than an additional cost added later. The argument that mandates like these make housing less affordable is actually untrue. Rather, the cost savings the customer realizes by both avoiding retrofit pricing and by having an EV ready parking stall day 1 outweighs whatever nominal added cost to the purchase price of the unit.



## **Hawaii Solar Energy Association**

*Serving Hawaii Since 1977*

Level 2 charging, which charges EV at a much faster pace (2-4X faster than Level 1) eliminates so-called “range anxiety” among EV adopters, encourages greater adoption levels, and creates a potential business opportunity for commercial building owners.

### **COMMENTS RE: SOLAR CONDUIT AND ELECTRICAL PANEL READINESS**

We support the language relative to what are essentially “solar ready homes”.

**The HSEA SUPPORTS BILL 25**, and we ask the council to adopt this ordinance subject to our comments above.

Thank you for the opportunity to testify.



**Hawaiian  
Electric**

Amended Testimony

**Testimony before the City and County of Honolulu  
Committee on Zoning, Planning and Housing**

**Hawaiian Electric Company, Inc.**

**Thursday, January 23, 2020**

**10:00 a.m.**

**Committee Hearing Room**

**Bill 25 (2019), CD1**

**Proposed CD2 to Bill 25 (2019), CD1 (Elefante)**

**Proposed CD2 to Bill 25 (2019), CD1 (Kobayashi)**

**Relating to the Adoption of the State Energy Conservation Code**

Chair Menor, Vice Chair Waters, and Members of the Committee,

Hawaiian Electric Company, Inc. (Hawaiian Electric) is in support of Bill 25 (2019), CD1 and the Proposed CD2 versions, relating to the adoption of the state energy conservation code. Bill 25 (2019), CD1 and the two Proposed CD2 versions recently introduced by Councilmembers Elefante and Kobayashi are proposing to regulate the design and construction of residential and commercial buildings for the effective use of energy. Two areas of the bill that Hawaiian Electric has focused on include solar photovoltaic (PV) readiness for single family homes, which is mentioned in the recently Proposed CD2 versions, and electric vehicle infrastructure for homes and commercial spaces.

Over the past several months, Hawaiian Electric has worked with numerous stakeholders and participated in several meetings in an effort to bridge various viewpoints and move towards a solution that all parties could agree upon.

First, with regard to the PV readiness proposal in the Proposed CD2 versions, the company believes PV readiness can serve as a catalyst to renewable generation and can contribute to the City's renewable goals. Thus, Hawaiian Electric supports a PV-ready requirement for new single-family residential development, but not for all new residential development. Hawaiian Electric's rationale is based on a variety of factors that make PV-ready as a requirement for multi-unit dwellings (MUD) impractical from a cost and implementation perspective. We understand through discussions with developers that

installing PV on all MUDs presents multiple logistical, physical, and cost challenges. Therefore, Hawaiian Electric would recommend clarifying language to Councilmember Elefante's Proposed CD2 version that clearly defines "residential buildings." As currently worded, "residential buildings" could potentially include single-family homes as well as MUDs.

Second, for Bill 25 (2019), CD1 Hawaiian Electric has focused on electric vehicle infrastructure for homes and commercial spaces. Bill 25 (2019), CD1 has the potential to make a big impact on the availability of EV charging infrastructure, particularly in areas of high population density. These areas are typically ideal locations for EVs in that residents tend to have shorter driving distances than those living in less dense, but more distant locations from the city center. Existing commercial locations and multi-family buildings face expensive retrofits to their parking facilities to be EV ready, with individual tenants facing a potentially long and onerous process to gain association or board approval to retrofit individual stalls. However, by making a proactive requirement to plan for and incorporate EV charging into future large building projects, the costs will be lower.

Hawaiian Electric supports flexible and creative options for builders and developers when designing their facilities to meet the Bill's objectives, while managing the costs associated with doing so. As a result, during discussions, Hawaiian Electric proposed to utilize a point system that would provide greater flexibility when designing new facilities. While the CD1 version does not include the point system, Hawaiian Electric is willing to work with the Committee on a proposed point system that could provide varying points depending on the proposed infrastructure solution, thereby creating a more flexible approach for developers to design their projects. For residential developers, the point system serves to incentivize higher capacity charging installations in common areas, thereby serving a greater number of vehicles in a more efficient manner. Another important component of the point system was to allow even greater flexibility for developers of low- and moderate-income housing, by including Level 1 charging infrastructure as an option for qualifying developments. Finally, the Companies suggested that the Level 2 charging station requirement amperage be established at 16 amps, which would help mitigate supporting infrastructure needs, such as conduit and transformer size, and manage other associated costs while providing about 12 miles of additional driving range for each hour charged.

In support of clean energy goals, both state and county policy mandate a transition away from imported fossil fuel in favor of alternative fuel, such as electricity, for ground transportation. The Mayors of all counties have agreed to support a 100% clean

transportation future, which implicates the need to begin providing charging infrastructure now to support future demand. Hawaiian Electric supports the urgent and growing need for EV charging infrastructure, and it is increasingly evident that new building developments built today without EV charging capability will likely require retrofitting in the future. Proactive planning, such as deploying EV charging capability today will help to mitigate and otherwise avoid increased future expenses. While, it is true that vehicle charging infrastructure increases costs for developers, retrofitting for the same needs can cost several times more in the future. In addition, leveraging common area charging at new residential developments allows such costs to be shared amongst tenants, as opposed to placing the burden upon individual tenants.

The fact is, EV readiness will become an expected part of modern housing and commercial development, in much the same way as electricity and indoor plumbing became an expected amenity in the past. Providing EV charging may present future financial opportunities, as building owners can choose how much they want to charge EV drivers for using their charging stations and can potentially generate revenue by charging for electricity or can offer free charging to attract new residents or customers. Including EV charging infrastructure will ultimately increase the value of a development over time and will show a commitment to future generations with clear foresight.<sup>1</sup>

EVs are coming fast, the U.S. electric vehicle market is accelerating rapidly with nearly ten years of year-over-year sales growth.<sup>2</sup> The need for more EV charging stations on Oahu is tremendous. Hawaiian Electric's backbone study forecasts that we will need seven-times more than the currently available EV infrastructure by 2030 to support the demand. One of the easiest and least expensive ways to provide for this future need is to include them in new building construction. While some express concerns that housing and commercial spaces should not become the "gas station" for EV drivers, EVs function differently than a typical internal combustion ("gas") vehicle. Gas vehicles require fill ups that take several minutes, whereas EVs charge at a slower rate, therefore it makes sense to charge where people will be staying for longer periods, like their homes or work. EVs will require behavioral shifts from

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<sup>1</sup> According to the U.S. Green Building Council, projects can earn LEED certification points by adding EV charging stations.

<sup>2</sup> [https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL\\_EV\\_Sales\\_Update\\_April2019.pdf](https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL_EV_Sales_Update_April2019.pdf)

vehicle owners, energy providers, and facility owners. It will be beneficial for future homes and workplaces to be built with their customer's needs in mind.

Hawaiian Electric supports zero-emission vehicles such as electric vehicles and recognizes the importance and positive impact the City and County can play in demonstrating leadership in this important market. The Companies have developed an EV strategy that acknowledges the need for more public charging in order for this nascent technology to truly proliferate. In fact, Hawaiian Electric has undertaken several efforts to support the adoption of electric vehicles, such as the development of a growing DC Fast Charger network, with over 17 locations across the Companies' service territory.

Providing increased access to EV charging at workplaces, commercial locations and multi-family buildings are all key priorities identified in the Companies' Electrification of Transportation Strategic Roadmap. This bill will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, Hawaiian Electric supports Bill 25 (2019), CD1 and the Proposed CD2 versions that include the concepts of PV readiness for single family homes and is willing to work with the Committee on a proposed point system as it relates to electric vehicle charging infrastructure as well as the language affective PV readiness homes. Thank you for this opportunity to testify.





January 23, 2020

Committee on Zoning, Planning and Housing  
Bill 25 (2019) CD2, C406.8.1 Multi-Unit Residential Infrastructure

Chair Menor:

On behalf of Michaels Development Company, this written testimony is in support of Bill 25 CD2, as related to C406.8.1 Multi-Unit Residential Infrastructure, including the paragraph "Exception: All affordable housing units offered for sale or rent to households earning at or below 140 percent of the area median income for Honolulu will be exempt from any electric vehicle infrastructure requirements."

The State of Hawaii, through the Governor and Legislature, have recognized that the lack of affordable housing is now a critical crisis. The counties, including the City and County of Honolulu, are also acutely aware of this problem and have taken aggressive measures to address the need for affordable housing units.

Further regulatory mandates only increase the cost of affordable housing and increase the difficulty and time for developers to deliver affordable housing for low- and medium-income residents. Bill 25 CD2, C406.8.1 Multi-Unit Residential Infrastructure, including the paragraph "Exception: All affordable housing units offered for sale or rent to households earning at or below 140 percent of the area median income for Honolulu will be exempt from any electric vehicle infrastructure requirements" clearly removes the burden of an additional regulatory barrier for affordable housing. Other versions of Bill 25 do not include this exemption for affordable housing and therefore do not align with the State and Counties' position of making affordable housing a priority.

Accordingly, we respectfully request that should this committee pass out Bill 25, that CD2, with C406.8.1 Multi-Unit Residential Infrastructure including the paragraph "Exception: All affordable housing units offered for sale or rent to households earning at or below 140 percent of the area median income for Honolulu will be exempt from any electric vehicle infrastructure requirements" be included to ensure that affordable housing units can continue to be built without additional regulatory obstacles.

Thank you for the opportunity to submit written testimony.

Yours Truly,

Karen Seddon  
Regional Vice President  
The Michaels Organization

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 3:33 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	David Ray Mulinix
Phone	8082398276
Email	dave.mulinix@juno.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Organization
Organization	Our Revolution Hawaii
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



# SIERRA CLUB OF HAWAI'I O'AHU GROUP

HONOLULU CITY COUNCIL  
Zoning, Planning and Housing Committee Hearing

**Testimony in SUPPORT of Bill 25 (2019) CD2 (Elefante)**  
RELATING TO THE ADOPTION OF THE STATE ENERGY CONSERVATION CODE  
Thursday, January, 21, 2020 10AM

Aloha Chair Menor and members of the Zoning, Planning and Housing Committee,

On behalf of the Sierra Club O'ahu Group and our 8,000 members and supporters, we are in strong support of Bill 25 (2019) CD2 as proposed by Councilmember Elefante (1/21/2020 10:04AM). This bill is an investment in Honolulu's future affordability and resilience.

We strongly urge the Zoning and Planning Committee to pass Bill 25 (2019) CD2 (Elefante) because it will help create a more resilient built environment in Honolulu. With the passage of this bill, our homes and businesses will be significantly more thrifty with energy, saving all of us money and helping to stem climate change. We see the already impressive adoption of electric vehicles increase even more as Level 2 charging infrastructure becomes ubiquitous. It is crucial for the City to set this course now and spare property owners prohibitively expensive retrofits for PV installation and EV charging.

## **What we like about Bill 25 CD2 (Elefante)**

- Provides a city solar water heater requirement that is fully consistent with state law
- Requires all new construction be PV-ready
- Requires all new construction be built to offer Level 2 EV charging; with lowered minimums for retail and affordable housing structures
- Allows for tropical building techniques, like jalousies
- Incorporates the amendments concerning "mass walls" recommended by the International Union of Bricklayers and Allied Craftworkers Local 1, and Hawai'i Laborers Union Local 368

## **What we would like to see improved in Bill 25**

- Remove the point system for EV-ready parking because it is unnecessarily complicated to be easily enforced
- Increase the minimum parking requirement for EV-ready stalls from 25% to 50% to ensure Honolulu's charging infrastructure meets the growing demand for electric vehicles.

### *Free choice*

For those council members concerned about ensuring a freedom of choice in energy sources, Bill 25 (2019) CD2 (Elefante) allows just that. The bill specifically identifies the variance process authorized in state law to allow those paying for the energy expense to opt for a gas water heater if it is indeed cheaper for their household. The key to this variance is that it must be the ratepayer, not the developer, that opts for the gas water heater variance. This is fair as it is the ratepayer, not the developer, paying the monthly water heating expense.

### *Affordability*

Our research shows that making new structures more energy efficient with solar water heaters and PV and EV capabilities built-in (instead of retrofitting structures) will save property owners a significant amount on their energy costs. It is estimated the energy retrofitting costs 4-8 times more money than incorporating the basic wiring at the time of construction. In addition, Solar water heaters save at least \$40 each month on water heating expenses. This saving estimate includes the slightly more expensive upfront cost of a solar water heater. What this savings estimate does not include is the expected increased cost of gas as oil becomes more expensive.

We know that as the state achieves its 100% carbon neutrality goals, oil imports will diminish and the price of products derived from oil, like the gas company's synthetic natural gas, will steadily and significantly increase. For the sake of the gas company's employees and customers, it is crucial that the City and County of Honolulu help the gas company transition its source of fuel to something not derived from fossil fuels. Adopting Bill 25 CD2 (Elefante) is one key benchmark in that transition plan.

We thank the City Council for advancing a solution-oriented policy that prioritizes the health and wellbeing of the environment and people of O'ahu. Bill 25 (2019) CD2 (Elefante) demonstrates a cost-effective equitable effort towards energy conservation with flexible options that reduce construction costs, make compliance easier, and provide long-term savings for residents.

Mahalo for the opportunity to support Bill 25 on second reading.

Marti Townsend  
Chapter Director  
Sierra Club of Hawai'i

# SPAN

Written Statement of Span.IO, Inc before the Honolulu City Council Committee on  
Zoning, Planning, and Housing  
Wednesday, January 22, 2020

*Span.IO, Inc. Supports Bill 25 pertaining to the adoption of the  
State Energy Conservation Code*

**Aloha Chair Menor, Vice-Chair Waters, and Members of the Committee on Zoning,  
Planning, and Housing:**

Thank you for the opportunity to submit testimony in **strong support** of Bill 25. We are writing to support this energy code policy and to demonstrate ready availability of technology that can help meet these new provisions.

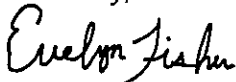
Span is a company with a mission of accelerating clean energy adoption through more streamlined and cost-effective installations of residential solar, storage, and electric vehicle (EV) chargers. After installation, Span's smart panel enables intelligent load balancing, allowing customers to get the most out of their home energy and providing a solution for grid-side needs like "solar smoothing" and demand response. Span's panel can be added to homes at the same time as other upgrades, or as a stand-alone product to make homes solar-, storage-, and EV charger-ready in the future.

By creating energy code provisions to support clean energy upgrades, Honolulu is enabling the wider-scale, accelerated adoption of clean energy that is critical to achieve Hawaii's 100% clean energy goals. Getting homes to be solar-ready by integrating a smart panel like Span is another essential step in this direction - it simplifies design, installation, and operation of clean energy technologies while providing the grid operators more flexibility in managing the emerging electrical network.

Our technology is ready to help support the new energy code provisions proposed in Bill 25 and we hope to see this policy put in place to enable Hawaii's clean energy goals.

Mahalo for the opportunity to provide testimony.

Sincerely,



Evelyn Fisher  
Span.IO, Inc.

# SPAN

**About Span:**

Span is a portfolio company of Elemental Excelsior, a Honolulu-based growth accelerator program founded and operating in Hawaii. We write in support of Bill 25 alongside Elemental Excelsior and other portfolio companies looking to bring better clean energy access to the communities of Hawaii.



USGBC  
2101 L STREET, NW  
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FOUNDERS

David Gottfried  
Michael Italiano  
S. Richard Fedrizzi

January 22, 2020

Chair and Members, Committee on Zoning, Planning and Housing  
Honolulu City Council  
530 South King Street, Room 202  
Honolulu, Hawai'i 96813

**RE: Support for Bill 25 (2019) Relating to the Adoption of the State Energy Conservation Code**

Dear Honorable Chair Ron Menor and Members,

On behalf of the U.S. Green Building Council (USGBC), a non-profit organization with 12,000+ member companies nationwide, and our strong community in Hawai'i, we are pleased to express our support for Bill 25 (2019). USGBC is committed to transforming the way buildings and communities are designed, built and operated through high-performing, cost effective, green buildings that save energy, water and money.

**About USGBC**

USGBC is a nonprofit organization dedicated to transforming the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous world. Best known for the successful Leadership in Energy & Environmental Design (LEED) green building certification system, we leverage our education, credentials, events, communications, and policy advocacy activities to support the public and private sectors in advancing high-performance, cost-effective, buildings that save energy, water and money. Reducing the contribution of buildings to climate change has long been a core area of our work along with a focus on supporting community resilience.

On behalf of our members we would like to express support for Bill 25 (2019) which adopts the State Energy Code, 2015 International Energy Conservation Code (IECC) and strong support for the additional amendments supporting electric vehicle (EV) readiness and solar-ready homes provision for infrastructure to support future solar PV systems on roofs.

As the City and State transition to cleaner energy and more efficient buildings it is essential building energy codes are updated to incorporate technology and infrastructure that supports those goals. Electric vehicles (EVs) not only provide benefits such as fewer emissions and cleaner air, but also create opportunities to benefit Hawai'i's renewable powered electric grid. Because cars are parked 95% of the time, users can charge them at night when Hawai'i's wind energy is the often most abundant but the least needed. An EV-ready code also directly supports the City's commitment to transform Hawai'i's ground transportation to 100 percent renewable fuel sources by 2035<sup>1</sup> and supports the State's carbon neutral by 2045 commitment.

However, the availability of charging infrastructure is still a barrier for many consumers. Without easy and convenient access to EV charging, drivers will be less inclined to choose an EV over a conventional vehicle. The proposed EV-ready code, which will

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<sup>1</sup><https://static1.squarespace.com/static/59af5d3cd7bdce7aa5c3e11f/t/5aa968fcc8302559ab8fdcab/1521051904681/Honolulu%2BProclamation%2B100%2525%2BRenewable%2BGround%2BTransportation%5B1%5D.pdf>



establish EV infrastructure requirements for new multi-family and commercial construction, is a critical step to make charging more accessible to consumers. Building in the electrical capacity, wiring, and physical access during construction provides a foundation for higher rates of EV sales in the state.

### **States and Local Governments around the Country are Adopting EV-ready Codes**

A number of states and municipalities around the country have EV-ready building codes for new commercial and multifamily construction. Similar to Honolulu's proposed code, these code requirements typically apply an EV-capable percentage to the total number of parking spaces. According to the Southwest Energy Efficiency Project, currently 20 states or local governments are implementing an EV-ready building code for commercial or residential buildings.<sup>2</sup> For example, in 2017 Atlanta, GA unanimously passed an ordinance that requires 20% of spaces at all new commercial and residential structures to be EV-ready<sup>3</sup> and in 2018 Vancouver increased the percentage of required EV-ready parking units from 20% to 100%.<sup>4</sup> Among other cities that have adopted EV-ready laws are New York City, New Orleans, Salt Lake City and Fort Collins.<sup>5</sup> Indeed, a wave of jurisdictions from Seattle to Atlanta have EV ready requirements for new construction.

### **Cost-Effectiveness**

In addition, EV-ready building codes are one of the most effective and low-cost strategies for local governments to encourage customers to buy or lease EVs. Where EV infrastructure can be incorporated into the initial plans of new construction, studies indicate that the costs of deploying EV charging infrastructure is modest, representing an insignificant share of total construction costs.<sup>6</sup> In addition, significant retrofit costs can be avoided by installing EV charging infrastructure in new construction. Retrofitting existing facilities to accommodate EV charging infrastructure can cost four to eight times more than in new construction.<sup>7</sup> According to a Southwest Energy Efficiency Project study of San Francisco, the cost per EV parking space in a new construction commercial building with 5-10 EV spaces was \$920. To add the same amount of EV chargers to an existing building was \$10,273.<sup>8</sup> And, a case study in Georgia showed a solar canopy with charging station had a 3.5 year payback period.

Demand for EVs is strong and growing; according to a 2018 report by Experian Information Solutions, the Honolulu market area had the eighth highest EV market share in the country and had grown more than 20% from October 2017 to October 2018. And, AAA reports that 20% of drivers want an electric vehicle for their next vehicle.<sup>9</sup> Cost-effective charging infrastructure will be needed to meet this burgeoning market.

<sup>2</sup> <http://www.swenergy.org/cracking-the-code-on-ev-ready-building-codes>

<sup>3</sup> [http://atlantacityga.igim2.com/Citizens/Detail\\_LegiFile.aspx?MeetingID=2068&ID=13626&Print=Yes](http://atlantacityga.igim2.com/Citizens/Detail_LegiFile.aspx?MeetingID=2068&ID=13626&Print=Yes)

<sup>4</sup> <https://pluginbc.ca/city-vancouver-goes-100-ev-new-builds/>

<sup>5</sup> [https://docs.google.com/spreadsheets/d/17MXkN7IUKYkBPbaNgXPIrUzZ\\_C7bh7w5pzIvs-LoBOY/edit#gid=391516650](https://docs.google.com/spreadsheets/d/17MXkN7IUKYkBPbaNgXPIrUzZ_C7bh7w5pzIvs-LoBOY/edit#gid=391516650)

<sup>6</sup> See, for example, "Electric Vehicle Charging Infrastructure: Multifamily Building Standards" California Air Resources Board, April 13, 2018; p.22 Available at: <https://ww3.arb.ca.gov/cc/greenbuildings/pdf/tcac2018.pdf>

<sup>7</sup> See also <https://microgridknowledge.com/electric-vehicle-codes-grid-benefits/> suggesting retrofitting for EV charging can cost five to six times higher than the cost of equipping new construction.

<sup>8</sup> <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>

<sup>9</sup> <https://newsroom.aaa.com/2018/05/1-in-5-us-drivers-want-electric-vehicle/>





We applaud the City and County of Honolulu for thinking ahead and wisely incorporating EV infrastructure when it can be provided at lowest cost, during construction. In doing so, Honolulu is providing solutions that respond to priorities of residents and businesses and advance community goals for climate change and resilience.

As a diverse body of practicing architects, engineers, sustainability consultants, building scientists, and assets managers, we hope to serve as a technical resource to the City and County of Honolulu as it takes actionable steps to help our climate and clean energy future.

Thank you for your consideration of our remarks. Please contact us if we can be of any assistance or have any questions.

Sincerely,

A handwritten signature in cursive script, reading "Melanie Islam".

Melanie Islam, AIA, LEED AP BD+C, LFA  
Board Chair  
USGBC Hawai'i

A handwritten signature in cursive script, reading "Elizabeth Beardsley".

Elizabeth Beardsley, P.E.  
Senior Policy Council  
U.S. Green Building Council

cc: Melanie Colburn, USGBC



January 23, 2020

Honorable Ron Menor, Chair  
Honorable Tommy Waters, Vice-Chair  
Honolulu City Council Committee on Zoning & Housing  
Honolulu Hale  
Honolulu, Hawaii 96813-3077

RE: Bill No. 25 - Relating to The Adoption of the State Energy Conservation Code

Chair Menor, Vice-Chair Waters, and members of the Committee:

My name is Gladys Quinto-Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

**BIA-Hawaii is in opposition to Bill 25.** We have strong concerns with regards to the proposed State Energy Conservation Code (SECC), and how it will impact housing affordability in Hawaii. As you all are well aware, Hawaii has the distinction of being one of the most expensive housing markets in the nation. We are in a housing crisis. Constricted supply and high demand have resulted in median prices of homes on Oahu currently reaching a new record of \$835,000. Increasing the supply of housing, together with minimizing the cost of housing construction while not compromising public health or safety, has been the focus of BIA-Hawaii over the last few years.

The State Energy Conservation Code (SECC) are not codes that deal with the protection of public health and safety. Rather, these codes are intended to save on energy consumption. While we support the need for energy conservation, there needs to be a common sense and economic assessment of the cost of compliance with these codes. **Mandating compliance with these codes as is being proposed in Bill No. 25 would be irresponsible, without first recognizing the impact on housing affordability on Oahu.**

The proposed amendments to the State Energy Conservation Code are difficult to understand as it involves the following:

- Review of the 2015 International Energy Conservation Code;
- The state's amendments to the 2015 International Energy Conservation Code, which were adopted as the State Energy Conservation Code in March of 2017;
- The proposed amendments to the State Energy Conservation Code (March 2017) proposed by the State Building Code Council and the Department of Planning and Permitting as Bill No. 25.



The 2015 International Energy Conservation Code has two parts: commercial and residential. Our comments are on the proposed amendments to the residential section of the code.

An itemized listing of the proposed amendments to the State Energy Conservation Code is provided in attached Exhibit A.

### **Tropical Zone Code and Jalousie Windows:**

#### **BIA Comments and Recommendations on this Section:**

While Hawaii falls under the Tropical Zone of the International Energy Conservation Code (IECC), sections of the existing State Energy Conservation Code (SECC) and some of the proposed amendments contained in Bill No. 25 will increase the cost of construction or remodeling a home on Oahu. Thus making housing less affordable to more local residents and families.

The louver/jalousie window was designed and built to provide maximum ventilation within the window opening. There is no surrounding frame around the glass with weather seals to provide an air tight seal when closed like sliding, hung, casement, awning window.

As such, we recommend that Bill No. 25 proposed condition No. 13 be amended to read as follows:

13. Jalousie windows are allowed in the Tropical Zone, and are exempt from the Window SHGH & Air Infiltration Rate Requirements stated in the Tropical Zone.

### **Solar Water Heater Mandate:**

#### **BIA Comments and Recommendations on this Section:**

The proposed amendment effectively eliminates instant gas water heaters, which are an efficient and reliable means of heating water. Also, eliminating gas will make it difficult to convert to new fuel technologies such as hydrogen at some point in the future. The infrastructure required to provide gas could be converted and used to distribute new fuel technologies.

The cost difference between instant gas water heating vs. solar water heating is approximately \$10,000 per home. This cost would be passed on to the home buyer. Eliminating gas heaters also reduces the incentive for developers to offer gas ranges and other appliances, meaning that these loads will have to be accounted for as well.

The state law requiring solar water heaters in all new single family residences was written prior to introduction and development of photovoltaics (PV) panels and as such does not present realistic and practical alternatives homeowners have today to reduce their fossil fuel consumption by using new technologies.

We suggest that this section be amended to read as follows:

Page 13, (28) New Section--R403.5.5 Solar water heating. Residential single-family buildings shall be encouraged to use solar, wind or another renewable energy source for not less than 90 percent of the energy for service water heating; however, gas water heaters may also be used.

Exception: If an architect or mechanical engineer licensed under Chapter 464, of the HRS, attests and demonstrates that installation is impracticable due to poor solar resource or installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed fifteen years, then one of the following technologies advancing renewable energy shall be used for service water heating: 1) a grid-interactive water heater; 2) a heat pump water heater; or 3) a gas-powered water heater that is fueled by a source that is not less than 90 percent renewable. For the purpose of this section, "grid-interactive water heater" means an electric resistance water heater fitted with grid-integrated controls that are capable of participating in an electric utility load control or demand response program.

#### **Mandatory Ceiling Fans:**

With respect to Page 13, (29) New Section--R403.6.2 Ceiling fans (Mandatory). A ceiling fan or whole house fan is provided for bedrooms and the largest space that is not used as bedroom.

We would strongly suggest the Council adopt the language approved by the County of Kauai which reads as follows:

"A ceiling fan or ceiling fan rough-in [is] or whole-house fan may be provided for bedrooms and the largest space that is not used as a bedroom."

#### **Mandate for Electric Vehicle Charging Capability:**

##### **BIA Comments and Recommendations on this Section:**

Most affordable housing projects particularly at the lowest end are multi-family. The proposed amendment requires 25% of multi-family at grade parking areas to be "electric vehicle ready". In addition to the cost of \$11,300 per EV-ready stall, this amendment creates a host of other problems.

The 25% requirement seems to be unreasonable considering the current electric vehicle ownership is less than 1% in the entire state (August 9, 2019 Star Advertiser). For multi-family projects, the infrastructure cost (i.e. trenching, conduits, and transformer upgrades) are significant and will be passed on to the homeowner in the cost of the unit.

Parking stalls are conveyed with units. Buyers who want EV-ready stalls may not get them, and buyers who don't want them may have to pay a premium for equipment that they will not use. The stalls will pull power from the unit's panel, so it is permanently attached to the unit. It's already a struggle to meet the minimum parking requirements, so providing extra stalls is out of the question. EV-ready stalls may be ganged in the center of the project, but that leads to other problems, as they will have to be individually metered. That would represent another extra cost to the homebuyer.



Common areas usually benefit all of the residents in the project. EV parking stalls are not considered common areas, and would only benefit those residents who have an electric vehicle. As such, costs associated with construction, installation and upkeep of these EV-ready parking stalls should not be a Common Area Maintenance (CAM) charged to everyone.

If power is pulled from a common circuit, sub meters can be used, however, they will add more cost, and the AOA will have to read them, billing each homeowner accordingly. Also, these stalls may be far away from the owner's units. The chargers will also need security to prevent unauthorized usage while the homeowner is not using it. Finally, the chargers will most likely be used during peak electric usage hours. The homeowner will come home, plug in their car, turn on their air conditioning, lights, TVs, and start cooking using their electric ranges and ovens. Meanwhile, all the common area lights and street lights will turn on. The transformers and lines within the development will all have to be upsized to accommodate these loads; costs which also get passed on to the home buyer.

We strongly recommend that multi-family projects with grouped, at-grade parking stalls be excluded from the requirement to provide 25% of multi-family parking be "electric vehicle ready." As such we proposed the following amendment to this section:

Bill 25 Proposed Amendments, Page 13; (31) New Section--*R404.3 Electric Vehicle Capability. In addition to what is required by the Electrical Code, a dedicated receptacle for an electrical vehicle must be provided for each single family residence which provides at a minimum, Level 1 service. Multi-family and workforce/affordable housing projects (i.e. those priced at 140% and below AMI) are exempt from this provision.*

Additionally, we have strong concerns with regard to commercial requirements in this section. Requiring new commercial properties to have 25% EV-ready parking stalls represents a hardship on many businesses, who depend on constant availability of parking to keep their businesses going. If a business has 12 stalls, 4 of those stalls would be dedicated to electric vehicles. a one-size approach to this makes no sense, as many businesses, such as small retail shops, take-out restaurants, financial institutions, and offices would not have people parking for the amount of time it would take to charge an electric vehicle.

### **Summary:**

The proposed code changes also increase costs in other areas. Homes will have to be built air tight and blower door tested, new ventilation requirements will require additional fans, changes to the window solar heat gain coefficients increase the cost of windows, additional insulation over steel framing adds material and labor cost.

As Bill No. 25 is being heard, we ask that the Council consider the following as it reviews each proposed amendment:

1. Is the proposed Code something that government would "like" to have or "need" to have?
2. How would the adoption of the proposed code amendments impact housing affordability on Oahu?

The Council is in a position to improve housing affordability by eliminating or suspending code mandates and requirements that do not compromise public health and safety. Adding these



unnecessary and costly requirements impacts housing affordability and will prevent more and more Oahu residents from having a place to live.

We support energy conservation, and can support adoption of the SECC, **provided** it includes our proposed amendments. We appreciate the opportunity to express our views regarding this matter.

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## **EXHIBIT A**

### **Existing language from International Energy Conservation Code:**

R401.2 Compliance. Projects shall comply with one of the following:

- a. Sections R401 through R404.
- b. Section R405 and the provisions of Sections R401 through R404 labeled "Mandatory."
- c. An energy rating index (ERI) approach in Section R406.

### **Bill 25 Proposed Amendments:**

R401 .2 Compliance. Projects shall comply with one of the following:

#### **4. The Tropical Zone requirements in Section R401.2.1.**

### **Existing language from International Energy Conservation Code:**

R401.2.1 Tropical zone. Residential buildings in the tropical zone at elevations below 2,400 feet (731.5 m) above sea level shall be deemed to comply with this chapter where the following conditions are met:

1. Not more than one-half of the occupied space is air conditioned.
2. The occupied space is not heated.
3. Solar, wind or other renewable energy source supplies not less than 80 percent of the energy for service water heating.
4. Glazing in conditioned space has a solar heat gain coefficient of less than or equal to 0.40, or has an overhang with a projection factor equal to or greater than 0.30.
5. Permanently installed lighting is in accordance with Section R404.
6. The exterior roof surface complies with one of the options in Table C402.3 or the roof/ceiling has insulation with an R-value of R-15 or greater. If present, attics above the insulation are vented and attics below the insulation are unvented.
7. Roof surfaces have a minimum slope of 1/4 inch per foot of run. The finished roof does not have water accumulation areas.
8. Operable fenestration provides ventilation area equal to not less than 14 percent of the floor area in each room. Alternatively, equivalent ventilation is provided by a ventilation fan.
9. Bedrooms with exterior walls facing two different directions have operable fenestration or exterior walls facing two directions.



10. Interior doors to bedrooms are capable of being secured in the open position.
11. A ceiling fan or ceiling fan rough-in is provided for bedrooms and the largest space that is not used as a bedroom.

**Existing language in State Energy Conservation Code:**

R401.2.1 Tropical zone. Residential buildings in the tropical zone at elevations below 2,400 feet (731.5 m) above sea level shall be deemed to comply with this chapter where the following conditions are met:

1. Not more than one-half of the dwelling unit is air conditioned
2. The dwelling unit is not heated.
3. Solar, wind or other renewable energy source supplies not less than 90 percent of the energy for service water heating.
4. Glazing in dwelling units shall have a maximum solar heat gain coefficient as specified in Table R402.2.1.

**Table R402.2.1. Window SHGC Requirements**

Projection Factor of overhang from base of average window sill <sup>b</sup>	SHGC
< .30	.25
.30 - .50	.40
≥ .50	N/A

<sup>b</sup>Exception: North-facing windows with pf > .20 are exempt from the SHGC requirement. Overhangs shall extend 2 feet on each side of window or to nearest wall, whichever is less.

5. Skylights in dwelling units shall have a maximum U-factor as specified in Table R402.1.2.
6. Permanently installed lighting is in accordance with Section R404.
7. The roof/ceiling complies with one of the following Options:
  - Comply with one of the roof surface options in Table C402.3 and install R-13 insulation or greater.
  - Install R-19 insulation or greater.

If present, attics above the insulation are vented and attics below the insulation are unvented.  
Exception: The roof/ceiling assembly are permitted to comply with Section R407.

8. Roof surfaces have a minimum slope of ¼ inch per foot of run. The finished roof does not have water accumulation areas.



9. Operable fenestration provides ventilation area equal to not less than 14 percent of the floor area in each room. Alternatively, equivalent ventilation is provided by a ventilation fan.
10. Bedrooms with exterior walls facing two different direction have operable fenestration or exterior walls facing two different directions.
11. Interior doors to bedrooms are capable of being secured in the open position.
12. A ceiling fan or ceiling fan rough-in is provided for bedrooms and the largest space that is not used as bedroom.
13. Jalousie windows shall have an air infiltration rate of no more than 1.2 cfm per square foot (6.1 L/s/m<sup>2</sup>).
14. Walls, floors and ceilings separating air conditioned spaces from non-air conditioned spaces shall be constructed to limit air leakage in accordance with the requirements in Table R402. 4.1.1.

**Bill 25 Proposed Amendments:**

Page 10, (24) (25) Proposed Revisions-- R401 .2.1 Tropical zone. Residential buildings in the tropical zone at elevations below 2,400 feet (731.5 m) above sea level must comply with this chapter by satisfying the following conditions:

1. Not more than one-half of the area of the dwelling unit is air conditioned.
2. The dwelling unit is not heated.
3. Solar, wind or another renewable energy source supplies not less than 90 percent of the energy for service water heating.
4. Glazing in conditioned space shall have a maximum solar heat gain coefficient as specified in Table R402.2.1.

**Table R402.2.1. Window SHGC Requirements**

Projection Factor of overhang from base of average window sill	SHGC
< 0.30	0.25
0.30 - 0.50	0.40
≥ 0.50	N/A

Exception: North-facing windows with pf > 0.20 are exempt from the SHGC requirement. Overhangs shall extend two feet on each side of window or to nearest wall, whichever is less.

5. Skylights in dwelling units shall have a maximum Thermal Transmittance (U-factor), as specified in Table R402.1.2.
6. Permanently installed lighting is in accordance with Section R404.
7. The roof/ceiling complies with one of the following options:

a. Comply with one of the roof surface options in Table C402.3 and install R-13 insulation or greater; or b. Install R-19 insulation or greater.

If present, attics above the insulation are vented and attics below the insulation are unvented.

Exception: The roof/ceiling assembly are permitted to comply with Section R407.

8. Roof surfaces have a minimum slope of one fourth inch per foot of run. The finished roof does not have water accumulation areas.

9. Operable fenestration provides ventilation area equal to not less than 14 percent of the floor area in each room. Alternatively, equivalent ventilation is provided by a ventilation fan.

10. Bedrooms with exterior walls facing two different direction have operable fenestration or exterior walls facing two different directions.

11. Interior doors to bedrooms are capable of being secured in the open position.

12. Ceiling fans or whole house fans are provided for bedrooms and the largest space that is not used as bedroom.

13. Jalousie windows shall have an air infiltration rate of no more than 1.2 cfm per square foot (6.1 L/s/m<sup>2</sup>).

14. Walls, floors and ceilings separating air conditioned spaces from non-air conditioned spaces shall be constructed to limit air leakage in accordance with the requirements in Table R402.4.1.1.

**Existing language from International Energy Conservation Code:**

R402.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more than 50-percent glazed shall be permitted to satisfy the SHGC requirements. Dynamic glazing shall be permitted to satisfy the SHGC requirements of Table R402.1.2 provided the ratio of the higher to lower labeled SHGC is greater than or equal to 2.4, and the dynamic glazing is automatically controlled to modulate the amount of solar gain into the space in multiple steps. Dynamic glazing shall be considered separately from other fenestration, and area-weighted averaging with other fenestration that is not dynamic glazing shall not be permitted.

Exception: Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table R402.1.1.

**Existing language in State Energy Conservation Code:**

R402.3.2 Glazed fenestration SHGC. Fenestration shall have a maximum solar heat gain coefficient as specified in Table R402.1.2. An area-weighted average of fenestration products more than 50-percent glazed shall be permitted to satisfy the SHGC requirements.

Dynamic glazing shall be permitted to satisfy the SHGC requirements of Table R402.1.2 provided the ratio of the higher to lower labeled SHGC is greater than the or equal to 2.4 and the dynamic glazing is automatically controlled to modulate the amount of solar gain into the space in multiple steps.

Dynamic glazing shall be considered separately from other fenestration, and area weighted averaging with other fenestration that is not dynamic glazing shall not be permitted.

Exception: Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table R402.1.1.

**Bill 25 Proposed Amendments:**

R402.3.2 Glazed fenestration SHGC. Fenestration shall have a maximum solar heat gain coefficient as specified in Table R402.1.2. An area-weighted average of fenestration products more than 50 percent glazed shall be permitted to satisfy the SHGC requirements.

Exception: Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table R402.1.2.

**Existing language in State Energy Conservation Code:**

Section R403.5.5 Solar water heating. Solar water heating systems are required for new single-family residential construction pursuant to section 196-6.5, HRS.

**Bill 25 Proposed Amendments:**

Page 13, (28) New Section--R403.5.5 Solar water heating. Residential single-family buildings shall use solar, wind or another renewable energy source for not less than 90 percent of the energy for service water heating.

Exception: If an architect or mechanical engineer licensed under Chapter 464, of the HRS, attests and demonstrates that installation is impracticable due to poor solar resource or installation is cost-prohibitive based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed fifteen years, then one of the following technologies advancing renewable energy shall be used for service water heating: 1) a grid-interactive water heater; 2) a heat pump water heater; or 3) a gas-powered water heater that is fueled by a source that is not less than 90 percent renewable. For the purpose of this section, "grid-interactive water heater" means an electric resistance water heater fitted with grid-integrated controls that are capable of participating in an electric utility load control or demand response program.

**Existing language in State Energy Conservation Code:**

R403.6 Mechanical ventilation (Mandatory). The building shall be provided with ventilation that meets the requirements of the International Residential Code or International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

R403.6.1 Whole-house mechanical ventilation system fan efficacy. Mechanical ventilation system fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

**Bill 25 Proposed Amendments:**

Page 13, (29) New Section--R403.6.2 Ceiling fans (Mandatory). A ceiling fan or whole house fan is provided for bedrooms and the largest space that is not used as bedroom.

**Existing language in State Energy Conservation Code:**

R404.2 Ceiling fans (mandatory). A ceiling fan or ceiling fan rough-in is provided for bedrooms and the largest space that is not used as bedroom.

**Bill 25 Proposed Amendments:**

*Page 13, (30) New Section--R404.2 Ceiling fans (Mandatory). A ceiling fan or whole-house fan is provided for bedrooms, provided the whole house mechanical ventilation system complies with the efficacy requirements of Table R403.6.1.*

**Bill 25 Proposed Amendments (EV Charging Language currently not in IECC or SECC:**

*Page 13, (31) New Section--R404.3 Electric Vehicle Capability. In addition to what is required by the Electrical Code, a dedicated receptacle for an electrical vehicle must be provided for each residence which provides at a minimum, Level 1 service.*

**Existing language from International Energy Conservation Code:**

R503.1.1 Building envelope. Building envelope assemblies that are part of the alteration shall comply with Section R402.1.2 or R402.1.4, Sections R402.2.1 through R402.2.12, R402.3.1, R402.3.2, R402.4.3 and R402.4.4.

Exception: The following alterations need not comply with the requirements for new construction provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
3. Construction where the existing roof, wall or floor cavity is not exposed.
4. Roof recover.
5. ~~Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.~~

**Existing Amendment in the State Energy Conservation Code:**

5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during a roof replacement shall meet one of the following:

- R-30 cavity insulation or the cool roof requirements in Section C402.3 for residential buildings.
- R-19 cavity insulation or the cool roof requirements in Section C402.3 for Tropical Zone residentza2 buildings."

6. Surface-applied window film installed on existing single pane fenestration assemblies to reduce solar heat gain provided the code does not require the glazing or fenestration assembly to be replaced.



**Bill 25 Proposed amendment:**

7. When uninsulated roof sheathing is exposed during alteration, a minimum of two of the following shall be installed:

- a. Energy Star compliant roof covering;
- b. Radiant barrier;
- c. Attic ventilation via solar attic fans or ridge ventilation or gable ventilation; or
- d. A minimum of two exceptions listed in C402.3.

Footnote: Shake roofs on battens shall be replaced with materials that result in equal or improved energy efficiency.



Hawaii Credit Union League

Your Partner For Success

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Unite  
for  
Good

Testimony to the Honolulu City Council Committee on Zoning  
Thursday, January 23, 2020  
Honolulu City Council Chambers

In Opposition to Bill 25, Relating to State Energy Conservation Code

To: The Honorable Ron Menor, Chair  
The Honorable Tommy Waters, Vice-Chair  
Members of the City Council

My name is Stefanie Sakamoto, and I am submitting this testimony on behalf of the Hawaii Credit Union League, the local trade association for 51 Hawaii credit unions, representing over 800,000 credit union members across the state. We offer the following testimony in opposition to Bill 25, Relating to the State Energy Conservation Code.

While we understand the intent of this proposed legislation, we have some concerns regarding the cost implications of this bill. The cost of doing business, as well as the cost of living in Hawaii, especially on Oahu, is exceptionally high. Local people, many of which are credit union members, are being priced out of our communities. The mission of Hawaii's credit unions has always been to offer low-cost financial services to the community, and bills such as Bill 25 would add significant financial strain on families that are already struggling.

We are also concerned about the provision in Bill 25 that would require new commercial buildings to have 25% of its parking stalls "electric vehicle-ready (EV-ready)". While we understand the intent of moving towards a "green" Hawaii, this requirement would be difficult to achieve. Currently, credit unions do offer EV chargers and EV-dedicated parking, as required by state law. While making transactions in credit unions, members are able to plug in their EV. However, the majority of transactions in any financial institution are very short – mostly less than 5-10 minutes. A 10-minute charge for an EV is not very beneficial, and requiring 25% of these stalls would not achieve the intent of the measure, and would only further increase the cost of doing business in Hawaii.

Thank you for the opportunity to provide comments.



HAWAII OPERATING ENGINEERS  
INDUSTRY STABILIZATION FUND



AMERICAN FLUOROCARBON  
OPERATIONS ASSOCIATION

*Uniting our strengths and working together  
for a better tomorrow.*

January 22, 2020

Honorable Ron Menor, Committee Chair- Zoning, Planning, and Housing  
Honorable Tommy Waters, Committee Vice Chair- Zoning, Planning, and Housing  
Honorable members of the Committee on Zoning, Planning, and Housing

RE: COMMENTS ON BILL 25 (2019), CD1 – RELATING TO ADOPTION OF THE STATE ENERGY  
CONSERVATION CODE.

Chair Ron Menor and Members of the Committee on Zoning, Planning, and Housing,

My name is Pane Meatoga III and I am the Community Liaison representing the Hawaii Operating Engineers Industry Stabilization Fund (HOEISF). We are a labor management fund representing 3500 unionized members in heavy engineering site work and 500 general contractors specializing in heavy site and vertical construction.

Hawaii Operating Engineers Industry Stabilization Fund opposes Bill 25 (2019) CD1 and we ask that the bill be deferred to a later date. Deferring the bill will allow all stake holders time to review the two proposed CD2 bills submitted by councilwoman Ann Kobayashi and councilman Brandon Elefante.

As mentioned above we do not support Bill 25 (2019) CD1 in its current form. Our purpose is to ensure that Bill 25 does not place any undue financial burden on the middle-income and lower-income residents of our island, by increasing the cost of buying or renting a home and increasing the cost of living in Hawaii. The state has made housing a priority. This bill in its current form does not follow that priority. As Governor Ige stated in his State of the State address, "We all deserve an opportunity to own our own home." This bill will put home ownership out of reach for many residents.

With that said, we welcome the opportunity to review and run economic impact scenarios on the CD2 versions proposed by councilman Brandon Elefante and councilwoman Ann Kobayashi. We believe that there is common ground that both sides can agree on.

Sincerely,

Pane Meatoga III  
Community Liaison  
Hawaii Operating Engineers Industry Stabilization Fund



# HAWAII TEAMSTERS & ALLIED WORKERS LOCAL 996

Affiliated with the International Brotherhood of Teamsters

[Local996@hawaii.teamsters.com](mailto:Local996@hawaii.teamsters.com)

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WAYNE K.S. KAULULAAU  
President/Principal Officer

Meeting Date: **January 23, 2020**

Agenda Item: **Bill 25 CD2 (2019)**

RYAN YOSHIDA  
Secretary – Treasurer

Position: **OPPOSE**

FREDERICK LIVA  
Vice President

Chair Menor, Vice Chair Waters and members of the Committee,

ANTHONY "BULLY" BADAYOS  
Recording Secretary

Hawaii Teamsters and Allied Workers Local 996 stand **OPPOSED** to Bill 25, relating to the adoption of the state energy conservation code, in its current form and supports the CD2 amendment offered by Councilmember Kobayashi which would **align the county building code with the state's provision for solar water heaters.**

WENDY NAILE  
Trustee

We object to the provisions of Bill 25, that require homes to be built with solar water heaters, taking away homeowners' options to use more affordable gas water heaters, which are also energy efficient.

JAMES "KIMO" LAROYA JR.  
Trustee

WALTER FOX III  
Trustee

This blanket ordinance impacts the construction for 25,000 residents who need affordable housing. Proponents will say that the costs for solar can be borne by the homeowner. The unfortunate truth is the people most hurt by this ordinance will be low- and moderate-income residents attempting to purchase a home. The cost difference between a solar water heater and an instantaneous gas water heater averages \$7,000. For a family of 4 making the area median income of \$85,000 that cost alone could be the difference between qualifying for a mortgage or not.

Our members and other consumers deserve a clear choice on how their homes are heated, when it comes savings, and resiliency. Please take into consideration emergency preparedness, in the wake of natural disasters. The Hawaii Emergency Management Agency estimates the loss of power during a civil emergency could last 14 days or more. Gas-powered water heaters and stoves would be the only available source of heating until power is restored. Gas lines are underground and are less susceptible to inclement weather.





# HAWAII TEAMSTERS & ALLIED WORKERS LOCAL 996

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One example of the benefit of gas utility customers is in Kaua'i. Residents in Hanalei, Wainiha, and Haena faced some of the worst flooding in history when 50 inches of rain fell in a 24 hour period in 2018. HG customers with gas powered water heaters, and stoves still had access to hot water and able to cook in their homes without power.

Our last concern is the 90 days in which this bill will be implemented. The gas utility has been; and is expected to be expanding their renewable energy portfolio. It would be unreasonable to expect the utility to invest its resources into newer more expensive technology and at the same time capping 20% of their income.

We need to diversify our energy supply and eliminating gas as an energy source is counterproductive. It also puts our economy in jeopardy and risks the livelihood of good Teamster jobs for 225 employees on Oahu.

The citizens, our members, and your constituents deserve the option and look forward to your leadership in weighing these factors.

Mahalo for the opportunity to testify.

Cody Sula

Government Affairs Liaison

Hawaii Teamsters and Allied Workers, Local 996



# **HAWAII TEAMSTERS & ALLIED WORKERS LOCAL 996**

Affiliated with the International Brotherhood of Teamsters

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Testimony to the City & County of Honolulu City Council  
Committee on Zoning, Planning and Housing  
Thursday, January 23, 2019 at 10:00 A.M.  
Committee Meeting Room, Honolulu Hale

**RE: BILL 25 (2019) CD1, RELATING TO ADOPTION OF THE STATE  
ENERGY CONSERVATION CODE**

Chair Menor, Vice Chair Waters, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") would like to provide the following comments to Council Bill 25, CD1, which would regulate the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code.

The Chamber is Hawaii's leading statewide business advocacy organization, representing about 2,000+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

The Chamber understands the intent of this bill; however, we are concerned with the impact that some of the mandates proposed in Bill 25 could have on affordable housing across Oahu. Hawaii has continuously been labeled as one of the most expensive housing markets in the country, with the median home price on Oahu well over \$800,000. During a time when we need to be looking at solutions to address affordable housing in our state, we need to be careful that any proposals or mandates will not ultimately place the burden on the folks that we are hoping to help.

In regard to the provision that would require new commercial buildings to have 25% of its parking stalls "electric vehicle ready," we are concerned about the impact this could have on businesses such financial institutions and convenience stores, where customer visits tend to be short visits, not enough time to sufficiently charge an electric vehicle. Requiring businesses to install electric vehicle-ready stalls would also result in additional costs to the business and limit the number of stalls available for customers that might not be able to afford to buy an electric vehicle.

Thank you for the opportunity to provide comments to City Council Bill 25.

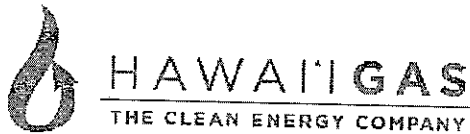
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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 7:52 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	R.J.
Phone	8087235541
Email	greenhomeshawaii@gmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Comment
Representing Organization	Organization Green Homes Hawaii
Do you wish to speak at the hearing?	Yes
Written Testimony	Electric vehicle charging is absolutely necessary to the state meeting its energy renewable energy goals. The cost of pre-wiring is very low, the materials costs are less than \$200 and the labor required is less than 2 hours. In total, this is under \$500, versus many thousands of dollars if wired once construction is complete.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



January 22, 2019

The Honorable Ron Menor, Chair  
The Honorable Tommy Waters, Vice Chair  
Members of the Committee on Zoning Planning and Housing  
City Council, City and County of Honolulu  
Honolulu, Hawaii 96813-3077

**RE: Bill 25 (2019) CD1-** Relating to the Adoption of the State Energy Conservation Code

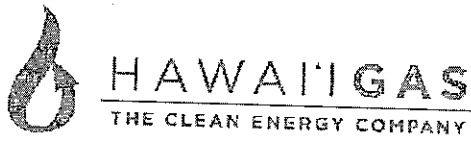
Aloha Chair Menor and Members of the Committee on Zoning, Planning and Housing,

Thank you for the opportunity to submit testimony on behalf of Hawaii Gas with comments and concerns regarding Bill 25 (2019) CD1 and the proposed CD2 drafts as introduced by Councilmember Kobayashi and Elefante, respectively. I am Edwin Sawa, the General Manager of Oahu for Hawaii Gas (HG). We have been providing Hawaii residents and businesses a cleaner, more affordable energy choice for 115 years.

Our company is committed to doing our part to reduce the effects of climate change on our state and the planet, and we are making great strides. We already produce clean, renewable, affordable and reliable energy, including solar. HG currently generates Renewable Natural Gas (RNG) at the Honouliuli Wastewater Treatment Plant, as well as hydrogen at our Synthetic Natural Gas (SNG) facility in Campbell Industrial Park. We are turning your waste into a renewable gas resource, which is being used to power the very efficient, affordable, on-demand gas water heaters Bill 25 CD1 and proposed CD2 (Elefante) seeks to limit. It is also important to note Hawaii Gas has the LOWEST carbon footprint of any energy utility in the state.

The cost of housing and cost of living in Hawaii is already outrageous. For some residents, the added cost of a solar water heater to a new home, instead of a gas option, is just too much to bear. The estimated cost difference between the two systems is at least \$7,000. We have heard a lot about solar tax credits and rebates, but federal credits are about to expire. Gas water heaters offer a long-term affordable, reliable, clean and renewable choice.

The proposed Bill 25-CD2 (Elefante) water heating provision essentially limits gas water heating, including renewable natural gas, as an energy choice for anyone building a new home or doing extensive renovations to their existing home. It makes the variance process so onerous and unworkable as to be impractical. It will not only drive up the cost of new home construction even further, but limit residents' water heating choices, particularly renewable energy choices.



We propose adopting the following amendment as described in Proposed Bill 25-CD2 (Kobayashi):

Amending item (29) to read:

Adding Subsection R403.5.5. Subsection R403.5.5 to read:

**R403.5.5 Solar water heating.** Residential single-family dwellings must comply with the solar water heater systems standards established by HRS Section 269-44, unless a variance is approved pursuant to HRS Section 196.5.

Kauai County, Maui County, and most recently Hawaii County, have all adopted essentially the same energy code amendment to defer to the state statute. This allows the building code to change if state law changes, without having to revisit the matter every time a legislative change is made.

Our residents are being pushed out of homeownership and pushed out of Hawaii. This Council has taken strong measures to address this issue, but the current CD1 & proposed CD2 (Elefante) takes a huge step backwards. By mandating costly EV charging and infrastructure requirements, additional solar water heating mandates and insufficient exemptions for affordable housing, these amendments add over \$20,000 to the cost of a new home. This additional cost will put homeownership out of reach for even more residents.

Based on our concerns as described above, together with our belief that the Council wants to balance both sustainability and housing challenges, Hawaii Gas strongly urges you to **adopt the Proposed Bill 25 CD2 (Kobayashi)** or in the alternative, provide stakeholders additional time to continue working on these issues to ensure the best possible outcome for our residents.

The renewable energy field is a big one. We believe there is a role for solar, wind—and gas energy, including an increasing role for renewable natural gas. We respectfully request that this committee take this into consideration, along with the severe impacts to housing costs and the cost of living for our residents if other proposals are adopted.

Sincerely,

Edwin Sawa  
General Manager-Oahu, Hawaii Gas

**Testimony of  
Pacific Resource Partnership**

City & County of Honolulu  
Committee on Zoning, Planning and Housing  
Councilmember Ron Menor, Chair  
Councilmember Tommy Waters, Vice Chair

Thursday, January 23, 2020  
10:00 a.m.

Dear Chair Menor, Vice Chair Waters and Members of the Committee:

Pacific Resource Partnership (PRP) appreciates Chair Menor's deferral of Bill 25, CD1 allowing the stakeholders additional time to document the fact-based impacts Bill 25 will have on home prices and prospective home buyers on Oahu. Moreover, PRP appreciates Councilmember Kobayashi's proposed CD2, which seeks to strike a more reasoned balance between the competing crises of climate change and lack of affordable housing on Oahu and in Hawaii.

PRP has encouraged all County Councils to recognize Hawaii's lack of affordable housing and high cost of living for what they are, major factors influencing Hawaii's residents to consider leaving Hawaii. In the Spring of 2019, PRP's Hawaii Perspectives (HP) survey documented that Hawaii households are indeed struggling and overwhelmed with Hawaii's high cost of living. Specifically, HP found that 45% of Hawaii residents have someone in their households who left Hawaii or someone who is seriously considering leaving Hawaii.

In 2017, Aloha United Way published its ALICE report, noting that in the City and County of Honolulu alone, 46% of total households struggle to make ends meet with a budget that does not allow for savings without sacrificing other necessities, such as childcare, food, healthcare, and/or transportation, meaning it is very difficult for Hawaii families, particularly ALICE families, to save enough money to buy into Hawaii's housing market. Combined with Oahu's unmet demand for an additional 25,000 plus homes on Oahu, the financial challenges facing Hawaii residents are very real and the continued supply of affordable housing on Oahu is essential to improving the quality of our residents' lives.

Given the above, PRP encourages this Committee to not view climate change and affordable housing as a binary choice in which the Council must prioritize one crisis at the expense of the other. Rather, this Committee should continue to weigh all sides and strike a balance that does justice to competing crises and the many and disparate challenges facing Hawaii's residents. We appreciate this opportunity to submit written testimony.



**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 7:38 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Richard A Furst  
Phone 8083088925  
Email RFURST808@GMAIL.COM  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25 CD2 (Elefante)  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Aloha Council Members,

Written  
Testimony

I am writing to express my support for Bill 25 CD2 (Elefante), the more stringent version of the adoption of Energy Code requirements. We need to move Honolulu County forward with adoption of robust standards for improving energy efficiency, including making it easier for residents to switch to EVs in the future. The costs for incorporating these changes are more affordable now than they will be as retrofits after initial construction. This is the time for leadership to take a stand for meaningful reduction of our energy consumption and carbon footprint. I humbly ask you to support Bill 25 CD2 (Elefante).

Mahalo and aloha,

Richard A. Furst, AIA  
Aina Haina, Honolulu

Testimony  
Attachment

Accept Terms  
and Agreement

1

IP: 192.168.200.67



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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:24 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Kristina Domingo  
Phone 4156963072  
Email domingok21@maryknollschool.org  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25 CD1  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing  
Aloha Chair Menor, Vice Chair Waters, and members of the Committee,  
I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's building energy code. This would have Honolulu's existing building energy code to increase people's health while also significantly reducing energy use for the new homes and buildings. With the changes, there will be broad changes in technology, building materials, and best practices. These would all consider Honolulu's unique island and building environment.

Also, this bill will ensure that new homes will either come equipped with solar or high-efficiency water heaters. This would help to close the loophole that has allowed thousands of fossil gas water heaters to be installed in our recent housing.

Finally, Bill 25 helps Honolulu in making the transition in using zero-emission with wiring and capacity for EV chargers to be installed. This will help to make electric vehicles more accessible to residents along with reducing the overall cost of our transition to clean transportation. But to strengthen this proposal, we respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity. This will help to both accelerate our clean transportation future and help to "future-proof" new construction. Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.  
Kristina Domingo, Honolulu, HI, 96822

Testimony  
Attachment  
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and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 7:49 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Jared Pasalo
Phone	8082287924
Email	jnpasalo@hotmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill25 CD2 (Kobayashi)
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support Bill 25 CD2(Kobayashi).
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 7:39 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Knut Robinson  
Phone (808) 341-8033  
Email Knut@therobinson.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

### Written Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for

EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of Vancouver. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Testimony  
Attachment

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Agreement

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 6:05 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Dylan Ramos  
Phone 8085516999  
Email dylanpk.ramos@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25, CD2 (Elefante)  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Aloha Chair Menor and respected Members of the Zoning, Planning and Housing Committee,

Mahalo for taking the time to review this additional testimony to clarify my support of Bill 25 now that amendments have been proposed by Councilman Elefante and Councilwoman Kobayashi.

Written Testimony To be clear, though I understand certain changes proposed by my own district's representative, Ms. Kobayashi, I support CD2 (Elefante). As noted in my original testimony, I recognize the need to be sensible and pragmatic when it comes to the transition to green infrastructure, but as I'm sure you all agree, we must also act with urgency as we work toward sustainability and climate crisis solutions. That said, it is Mr. Elefante's proposals that are the most forward-thinking and future-minded.

Whereas CD2 (Elefante) provides for a City solar water heater requirement that is fully consistent with State law, requires all new construction be PV-ready and offer Level 2 EV charging with reduced specifications for retail and affordable housing structures, and allows jalousies, CD2 (Kobayashi) creates no independent authority for the solar water heater mandate (so if the State abolishes the requirement then it would disappear at the City level as well), has no PV-ready requirement, only requires trickle charger EV-ready parking and no such parking at commercial buildings or affordable housing structures, and limits the use of jalousies.

Per the Sierra Club of Hawai'i: "From our review of the data, requiring new construction to

be built with the future in mind (wired for level 2 EV charging, equipped for PV installation) saves significant costs on future-retrofitting while not significantly increasing the cost of current construction. Similarly, authorizing the City to follow through on the state's solar water heater mandate saves homeowners a lot of money on their monthly electricity bills, while not significantly increasing the cost of housing or putting the gas company out of business. For the solar water heater mandate, there is a variance process for homeowners that really would prefer a gas water heater in their home."

All of this is important to take into account and I very much appreciate the entire Committee's consideration of these matters. When it comes to Bill 25, mahalo for supporting CD2 (Elefante).

Aloha,  
Dylan Ramos  
District 5 (96816)

Testimony  
Attachment

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and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 5:42 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Andrea Nandoskar
Phone	808-358-6203
Email	birdofparadise@hawaii.rr.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	7 (Bill 25, 2019)
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I strongly support Bill 25 as an important step toward addressing the reduction of fossil fuel use, crucial to mitigating and reversing the climate disruption we are already experiencing here in Hawaii. Mahalo for your support!
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 5:28 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Stacey Gray  
Phone 808-594-9891  
Email staceyfgray@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

Thank you for taking up this important bill. I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the Honolulu's building energy code. It would update Honolulu's existing building energy code—which is nearly fourteen years out of date—to significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written  
Testimony

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed fossil-fule gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). I personally wanted to purchase an EV for years but when I lived in a condo I had no place to charge one. Adding charging options will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2

charging capacity, similar to the city of Vancouver. This will help to accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Stacey Gray, Honolulu, 96822

Testimony  
Attachment

Accept Terms and  
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IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 4:50 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Jessica dos Santos
Phone	(808)381-4069
Email	nrtshrlv@gmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	7. BILL 25 (2019), CD1 – RELATING TO ADOPTION OF THE STATE ENERGY CONSERVATION CODE. (Elefante's CD2)
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I support this clean energy bill as I believe that all development needs to take our green energy needs into account.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 4:28 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Nanea Lo  
Phone 8084543504  
Email naneaclo@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item agenda item 7, Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Hello,

Written  
Testimony

My name is Nanea Lo. I come from Papakōlea, O‘ahu. I am a lifelong residence of Hawai‘i. I am writing in to say I FULLY SUPPORT CM Elefante's CD2 Bill which is agenda item 7. I believe that a city solar water heater requirement that is fully consistent with state law. I believe that all new construction be should require and be PV-ready. It should be required that all new construction be built to offer Level 2 EV charging; with reduced specifications for retail and affordable housing structures.

Please vote in support as well.

me ke aloha ‘āina,  
Nanea Lo

Testimony  
Attachment

Accept Terms and Agreement 1

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**From:**  
**Sent:**  
**Subject:**

CLK Council Info  
Thursday, January 23, 2020 12:42 AM  
Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name KATARINA RUIZ  
Phone 18083795648  
Email katarinavictoria.ruiz@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item BILL 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Dear Board,

Please think about what we are leaving our keiki with when we are long gone. As a teacher, I helped about 60 students passionately write testimony for their futures. Please do not buy into real estate developer and industry lobbying.

Written  
Testimony

Mr. Michael Bloomberg assigned us as a city in the American Cities Climate Challenge. I could only hope that my voice would influence you as much as if he were present at the hearing. "Bloomberg highlighted Honolulu's innovative and ambitious climate action plan for the Challenge, which is designed to reduce air pollution and citywide emissions specifically from the transportation and buildings sectors – two areas that are on average responsible for 80% total of all citywide emissions and over which mayors have significant authority."

The below represents a city that is prepared for what is to come:

A city solar water heater requirement that is fully consistent with state law  
Requires all new construction be PV-ready  
Requires all new construction be built to offer Level 2 EV charging; with reduced specifications for retail and affordable housing structures  
Allows jalousies

Aloha,I

Katarina

Testimony

Attachment

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and Agreement

1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 11:20 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Kelsey Y Nichols
Phone	8089276681
Email	kelseyyn@hawaii.edu
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2 (Elefante)
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	We either invest in our future now or else accumulate the cost of inaction.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 11:14 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Tenaya Jackman  
Phone 8082651241  
Email tenayajackman@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item 7, Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? Yes

Aloha Chair Menor, Vice Chair Waters and members of the Committee,

I am writing in strong support of Bill 25 to update Honolulu's building code to make new construction more energy efficient. As a public health professional for 27 years, a member of the Board of Directors of the Hawaii Public Health Association and co-chair of the American Public Health Association's Climate Change and Health Committee, I urge support of this measure that takes steps toward reducing the impacts of climate change that will have significant health benefits.

Written  
Testimony

Part of the reason climate change is so terrible is the threat it poses to human life. Choices we make now will determine the magnitude of climate effects on children and their children. If we fail to take action now to reduce carbon impacts from new buildings and require that all new parking stalls be prepared for Level 2 charging capacity we miss a major health opportunity to reduce future health risks.

Climate change is the greatest threat to human health in the 21st century. Every individual will be affected by some combination of extreme weather, air pollution, sea level rise, infectious disease or a host of other challenges to daily living. We will experience changes in the severity and frequency of health problems that are already affected by climate and unprecedented or unanticipated health problems in places where they have not previously occurred. Action to limit the impacts of climate change will help us avoid thousands of deaths, increased health care expenses, caregiver services and lost productivity.

Reducing emissions and promoting energy efficiency through this bill will benefit the health



of residents in Hawaii in the near and distant future. Please advance Bill 25.

Thank you for considering my testimony.

Tenaya Jackman  
Honolulu, Hi 96815

Testimony  
Attachment

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IP: 192.168.200.67

**From:**  
**Sent:**  
**Subject:**

CLK Council Info  
Thursday, January 23, 2020 6:58 AM  
Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Mark Nokes, Ph.D.  
Phone 8089212265  
Email manokes@yahoo.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item 7 (Bill 25 CD2 Elefante)  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

Aloha Council Members: Please approve Mr. Elefante's CD2 Bill 25. It is vital to have strong regulations to insure that we meet our clean energy goals. Thus, solar water heaters, photovoltaic compatibility, and electric vehicle recharging stations in residential and commercial buildings are necessary. It is also necessary to be able to open windows via jalousies in any new construction. Mahalo for your consideration.

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 10:58 AM  
**Subject:** Council/Public Hearing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name                      Lawrence Hinds  
Phone                     8082607940  
Email                     larry@divefish.com  
Meeting Date            01-23-2020  
Council/PH  
Committee               Council  
Agenda Item             Item 7, Bill 25 CD2  
Your position on  
the matter               Support  
Representing            Self  
Organization  
Do you wish to  
speak at the  
hearing?                No

Written  
Testimony

There is much discussion on investing in Honolulu's future. Considering we live on an island with over 1,000,000 people (more when tourists are included), there demands planning for the future that maximizes energy efficiency. Today, Oahu is known for world famous traffic congestion, in the top 10 for fender bender accidents, and abandoned cars. Among electric vehicle owners, Hawaii is a state with an EV charge network that is substandard at best. We live in a state averaging 75% yearly sunshine and tremendous opportunity exists in solar energy as well. The quality of life for future generations here will be greatly impacted by our legislators. Enacting laws that mandate energy efficient practices and Level 2 or better EV charge stations is a crucial step in our future. Please support Elefante's Environmental CD 2.

Testimony  
Attachment  
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IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 6:42 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Steve S Nishimura  
Phone 8084698462  
Email ssnmura@gmail.com  
Meeting Date 01-23-2020  
Council/PH Zoning  
Committee  
Agenda Item Bill 25  
Your position on the Support  
matter  
Representing Self  
Organization  
Do you wish to speak No  
at the hearing?  
Written Testimony I am in favor of bill 25 and all efforts to keep clean energy resources available. It is short term thinking not to incorporate energy efficiency in any building project in this day and age.  
Testimony Attachment  
Accept Terms and 1  
Agreement

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 6:25 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Delphine  
Phone 8083196879  
Email delphine.homerowski@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written Testimony This piece of legislation is key to advance sustainability in the Honolulu District and in the State of Hawai'i and bring us closer to attain the 100% by 2045 goal. Hawai'i, and the City and County of Honolulu in particular, has taken the lead in making EV technology accessible, but more is needed.

Enforced legislation is the most effective method in advancing clean transportation and clean energy consumption, and it is time to put environmental interest at the forefront of Hawai'i local policies. This is why I urge you to pass Bill 25, to support a clean future for generations to come.

Thank you,  
Delphine Homerowski

Testimony  
Attachment

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 6:19 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Ryan Yoshida  
Phone 8083418044  
Email ryanyosh@gmail.com  
Meeting Date 01-23-2020  
Council/PH  
Committee Zoning  
Agenda Item Bill25 CD2 (Kobayashi)  
Your position on  
the matter Support  
Representing Self  
Organization  
Do you wish to  
speak at the  
hearing? No

Written  
Testimony

o I support Bill25 CD2 (Kobayashi). Kauai County, Maui County, and most recently Hawaii County, have all adopted essentially the same energy code amendment as Bill 25 CDS (Kobayashi) that defers to the state statute. This allows the building code to change if state law changes, without having to revisit the matter every time a legislative change is made. It also is less confusing to an already challenging building and permitting process.

Testimony  
Attachment

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IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 6:17 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Barbara George
Phone	6385690
Email	barbarageorge40@yahoo.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	#7, Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	STRONGLY SUPPORT CM ELEFANTE'S VERSION OF BILL 25, CD2!!
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 12:55 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Debra Gomez
Phone	8084308174
Email	dgomezota@gmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support Bill 25 CD2 as it aligns with state law and all other counties.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:58 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Neela Vadivel
Phone	8082216082
Email	neela@stillandmovingcenter.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	Anything we can do to support better, more environmentally friendly, more economical practices should be endorsed and supported.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:57 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Gwen Cruise
Phone	8087325156
Email	gwendellyn@gmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25 CD2 (Elefante)
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I am a homeowner and landlord and I fully support this bill. This bill makes good financial sense and it is also an important "first steps" in addressing climate change.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:53 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Knut Robinson  
Phone (808) 341-8033  
Email Knut@therobinson.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written  
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for

EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of Vancouver. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Testimony

Attachment

Accept Terms and  
Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:45 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Samantha Steenhuis  
Phone 8087790220  
Email steensam000@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written  
Testimony

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of

Vancouver. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

Samantha Steenhuis  
Honolulu

Testimony  
Attachment  
Accept Terms and 1  
Agreement

IP: 192.168.200.67

COMMITTEE ON ZONING, PLANNING AND HOUSING

Honolulu City Council  
January 23, 2020, 10:00 AM

TESTIMONY IN SUPPORT OF BILL 25 CD2  
Relating to the Adoption of the State Energy Conservation Code

Aloha Chair Menor, Vice Chair Waters, Members of the Honolulu City Council Committee on Zoning, Planning and Housing,

My name is Kim Watts and I'm a student intern with Faith Action and I'm in the graduate program at UH Manoa, Myron B. Thompson School of Social Work earning a master's degree, with a concentration in public policy. Faith Action for Community Equity (Faith Action, formerly known as FACE) is a grassroots interfaith 501(c)3 non-profit organization driven by a deep spiritual commitment to improving the quality of life for our members and all the people of Hawaii.

*Honolulu is a leader in many climate policies and its residents have high expectations for the future of O'ahu. Bill 25 is the next logical step in our island's progress toward a livable, stable climate future. Some of our expectations for the future of Honolulu are that:*

Courtesy of Sierra Club

1. We need to make sure the City has its own authority to advance the solar water heater mandate consistent with state law, which provides an exemption that homeowners can apply for if a gas water heater truly makes sense for them.
2. We need to make sure electrical vehicle charging infrastructure is ubiquitous on O'ahu. A minimum of 25% of all parking stalls at residential and commercial facilities are EV-ready.
3. We need to make sure new construction on O'ahu is as energy efficient as possible
4. Energy efficiency measures are a "no-brainer" way to reduce monthly electric bills for homeowners and renters.
5. Solar water heating significantly reduces monthly electricity bills compared to gas water heaters.
6. Electric vehicles are cheaper to operate and maintain than gas cars
7. Bill 25 is an important energy efficiency bill that needs to be adopted in its strongest possible form because it sets the stage for the future of O'ahu's climate resiliency

Please protect Hawai'i and work to preserve it for the benefit of future generations. We look forward to continuing to work with the City to take proper action on climate change. As a veteran and a concerned citizen, I respectfully ask for the committee to support **Bill 25 CD2** and that you please strengthen it further, leading the way for future climate resilient policies, and further incorporation of climate resiliency into everyday decisions made by our leaders.

Mahalo for the opportunity to testify,

Kim Watts | BSW  
Faith Action Intern  
MSW Candidate UH Manoa, Myron B. Thompson SSW  
808-205-1694



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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 3:23 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Jennifer Milholen
Phone	8082777096
Email	jennifer@kokuahawaiiifoundation.org
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support Elefante's Bill 25 CD2, for common sense building code and efficiency reform.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 4:15 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Randy Ching  
Phone 942-0145  
Email makikirandy@yahoo.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25 CD2 (Elefante)  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? Yes

Aloha Chair Menor and members of Zoning, Planning and Housing Committee,

I support Bill 25 CD2 (Elefante). We have a tremendous amount of sunshine. That sunshine can heat our water essentially for free after the initial costs of installing the solar panels. This will eliminate greenhouse gas emissions from a gas powered water heater.

When D.R. Horton got its boundary amendment from the LUC, one of the conditions put in the D & O was installing solar water heaters in accordance with state law. Only rarely was a variance supposed to be allowed for gas water heaters. That condition has been turned on its head -- every variance request from D.R. Horton for gas water heaters has been granted with one or two exceptions. The result will be disastrous for our climate.

Written  
Testimony

Solar water heaters will reduce the cost of living on O'ahu.

Economists have shown that solar water heating significantly reduces monthly electricity bills.

It is estimated that retrofitting buildings to provide EV charging is 4-8-times more expensive than constructing them with that capability built-in.

Energy efficiency measures will reduce monthly electric bills for homeowners and renters.

Thank you for the opportunity to testify.

Sincerely,

Randy Ching  
Honolulu

Testimony  
Attachment

Accept Terms and  
Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 4:05 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Adele Balderston  
Phone 9178929631  
Email heyadele@gmail.com  
Meeting Date 01-23-2020  
Council/PH Zoning  
Committee  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

I support this Bill and I believe it will be a monumental step toward decreasing our dependence on fossil fuels, however, I also believe Bill 25 doesn't go far enough. All the electric vehicles and water heaters in the world won't do us any good if HECO is still burning oil shipped in by oil-powered Matson boats to generate our electricity. The City and State need to shut down all oil-generated electricity statewide and hold HECO to that standard ASAP! No more oil-powered electricity!!!

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 7:18 PM  
**Subject:** Council/Public Hearing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Eli Stein  
Phone (808) 286 - 1042  
Email elistein@student.midpac.edu  
Meeting Date 01-23-2020  
Council/PH Committee Council  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Honolulu City Council  
Zoning, Planning, and Housing Committee  
Support for Bill 25, "Relating to the adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Dear Chair Menor, Vice Chair Waters, and Members of the Committee,

Written Testimony I am testifying in support of Bill 25, "Relating to the adoption of the State Energy Conservation Code" because I want to see a clean environment and a sustainable future.

I believe that Bill 25 will make tremendous strides towards a better future because, first off, it will update the existing building efficiency code. Our current building efficiency code is almost fourteen years out of date, and by updating the building efficiency code, we can save almost \$1 Billion in energy costs for O'ahu, spread over the next 20 years.

Second, Bill 25 will create the change that all new homes will come equipped with either a solar water heater, a high-efficiency heat pump water heater, or a smart grid-interactive water heater. By implementing this into our community, we will all save energy and

money, and it will be better for the environment because, as a community, we will all be more focused on using renewable energy.

Finally, Bill 25 would help to turn Honolulu into an electric-vehicle-friendly city. It would require that a specific amount of new parking stalls be installed with the wiring and capacity for EV chargers, which would help to transition Honolulu into a zero-emission city. This action would also help to reduce the cost of transitioning to zero-emissions and it would allow for easier transportation for residents who own electric vehicles.

As a child that has been born and raised in O'ahu, I want to see our island thrive and not be impacted by the greenhouse gases that we are currently emitting. I firmly believe that Bill 25 will make a tremendous difference in transforming Honolulu into a zero-emission city and Bill 25 will create beneficial changes that we will experience for many years to come.

Please advance Bill 25 with the EV-ready ammendment.

Thank you for considering my testimony.

From,  
Eli Stein  
Honolulu, Hawaii  
96825

Testimony  
Attachment  
Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:00 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Russell
Phone	808.482.4822
Email	rwinkelman@hawaiiigas.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill25 CD2 (Kobayashi)
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	<p>o I support Bill25 CD2 (Kobayashi). Kauai County, Maui County, and most recently Hawaii County, have all adopted essentially the same energy code amendment as Bill 25 CDS (Kobayashi) that defers to the state statute. This allows the building code to change if state law changes, without having to revisit the matter every time a legislative change is made. It also is less confusing to an already challenging building and permitting process.</p>
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:06 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name August Kryger  
Phone 5737772369  
Email augustkryger@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

Hello, I am writing in strong support of Bill 25. This bill is important not just for modernizing housing developments, but more importantly for helping to lay the groundwork for protecting our land and planet from harmful practices. When we moved to Oahu, our home was pre-wired for an electric vehicle. Prior to moving here, we hadn't thought of owning one because of the difficulty of dealing with charging, etc. However, because our home was pre-wired for an electric vehicle, we decided to purchase one. That is now our daily-driver, and we are so happy that we are able to help curb our pollution and emission of harmful gasses into the air. In addition to the availability of ease-of-use for electric vehicles, the other items contained in bill 25 represent important steps forward in ensuring we are taking measures to protect the future of our land. This is crucial not just for us, but for our children and the sustainability of our life on this island, and on this planet. Please pass this bill. Thank you for your consideration.

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:18 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name John K Cheever  
Phone 8082183138  
Email jcheever88@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Honolulu City Council  
Zoning, Planning and Housing Committee  
Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"  
January 23, 2020, 10:00 AM hearing

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

Written  
Testimony

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for

EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of Vancouver. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you for considering my testimony.

John Cheever

Testimony  
Attachment  
Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:17 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Joseph Boivin  
Phone 808 343-4426  
Email jboivin808@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Zoning  
Agenda Item Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Councilman Waters,

From 2009 through 2018, I served as Executive Vice President at Hawaii Gas. I led the company's efforts to bring LNG to Hawaii and develop renewable natural gas resources.

We have had cost-effective solar water heating on our home for 15 years in Hawaii and I support Bill 25.

Solar water heating on all new single family homes is the right decision for Hawaii where we have some of the most abundant solar resources in the world.

Written Testimony Yes it may be a little more expensive upfront as compared to installing a gas water heater, but after a few years the hot water is all free.  
Despite the claims, the economics do not in any way favor the ongoing use of gas energy over the sun. To argue otherwise is disingenuous and ludicrous.

Promoting the use of natural gas or propane, renewable or not, does not make sense in Hawaii, and especially so given the impact that we know fossil fuels are having on our environment.

The Council needs to move forward with Bill 25 and should also consider addressing the conversion of existing homes.

The Bill will have a negligible impact on Hawaii Gas sales and its employees.

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 7:10 AM  
**Subject:** Council/Public Hearing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Christine Ahn  
Phone 3104829333  
Email Christineahn@mac.com  
Meeting Date 01-23-2020  
Council/PH Committee Council  
Agenda Item CM Elefante Bill 25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written Testimony I support CM Elefante's bill supporting Environmental CD 2 because we need:  
- a city solar water heater requirement that is fully consistent with state law  
- Requires all new construction be PV-ready  
- Requires all new construction be built to offer Level 2 EV charging; with reduced specifications for retail and affordable housing structures  
- Allows jalousies

Testimony Attachment  
Accept Terms and Agreement 1  
As the owner of an EV, I'm doing my part to contribute to zero emissions and a clean environment here on the island. I need my legislators to do their part.

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:16 PM  
**Subject:** Council/Public Hearing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Karen M Kimbrell  
Phone 8082634221  
Email karen.kimbrell@gmail.com  
Meeting Date 01-23-2020  
Council/PH Committee Council  
Agenda Item Agenda item 7, Bill 25, CD2  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? Yes  
  
Written Testimony It is extremely important that Council Member Elefante's version of Bill 25 is accepted (CD2). We need to do all that is possible to curb this climate crisis. This crisis requires strong and forward-thinking action if we are to survive and have a world for our children.  
  
Testimony Attachment  
Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:39 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Nicole Buyukacar
Phone	(808)371-2537
Email	nbuyukacar@gmail.com
Meeting Date	01-23-2019
Council/PH Committee	Zoning
Agenda Item	7
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 9:07 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Steven Lee Montgomery, Ph. D.  
Phone 342 6244  
Email manninga001@hawaii.rr.com  
Meeting Date 02-22-2020  
Council/PH Committee Zoning  
Agenda Item 1 B25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Aloha Chair Menor, Vice Chair Waters, and members of the Committee,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code."

This is a critical clean energy and climate measure that would modernize the City & County of Honolulu's (Honolulu's) building energy code. This modernization updates Honolulu's existing building energy code—which is nearly fourteen years out of date—to increase occupant health and comfort while significantly reducing energy use for new homes and buildings. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

Written  
Testimony

In addition, this measure should ensure that new homes come equipped with either solar or high-efficiency water heaters, helping to close the loophole that has allowed thousands of fossil gas water heaters to be installed in recent housing.

Finally, Bill 25 helps Honolulu make the transition to zero-emission vehicles by requiring that a certain percentage of new parking stalls be "EV-ready" (with wiring and capacity for EV chargers to be installed). This will help to make electric vehicles more accessible to residents and reduce the overall cost of our transition to clean transportation. This provision should be strengthened significantly, however. We respectfully request that this committee amend Bill 25 to include a requirement that 100% of new parking stalls (for commercial and multi-family buildings) be prepared for Level 2 charging capacity, similar to the city of

Vancouver. This will help to “future-proof” new construction and accelerate our clean transportation future.

Please advance Bill 25 with this EV-ready amendment.

Thank you, steve  
Steven Lee Montgomery, Ph. D.  
94-610 Palai Street, Waipahu, Hawai'i 96797-4535 USA  
tel 808-676-4974

Testimony  
Attachment

Accept Terms  
and Agreement 1

IP: 192.168.200.67



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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 4:59 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Ian Tierney
Phone	8089497770
Email	itierney@kya.design
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	BILL 25 (2019) RELATING TO ADOPTION OF THE STATE ENERGY CONSERVATION CODE.
Your position on the matter	Comment
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Amending my previous testimony to support the Administrations version of CD2.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Wednesday, January 22, 2020 8:31 PM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Tony Hall  
Phone 8089231077  
Email tonyhall@fastmail.com  
Meeting Date 01-23-2020  
Council/PH Zoning  
Committee  
Agenda Item Bill 25  
Your position on the matter Comment  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

Please consider requiring 100% EV chargers for all new parking spaces at all newly constructed residential multi-unit buildings. We are currently in the beginning of a transition to electric vehicles. It is likely that only electric vehicles will be sold in 20 years and of course these new residential units will then need the ability to charge. Thank you.

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 8:04 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name	Amanda Kryger
Phone	5732893275
Email	lavonashea@gmail.com
Meeting Date	01-23-2020
Council/PH Committee	Zoning
Agenda Item	Bill 25
Your position on the matter	Comment
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	I am in support of modernizing the building guidelines and codes to increase homes with less dependency on the grid, including requiring solar powered appliances and solar batteries/power. The long term benefits far outweigh the upfront costs.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

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**From:** CLK Council Info  
**Sent:** Thursday, January 23, 2020 10:52 AM  
**Subject:** Zoning, Planning and Housing Speaker Registration/Testimony

## Speaker Registration/Testimony

Name Corrie Miller  
Phone 8089836000  
Email millercb@hawaii.edu  
Meeting Date 01-23-2020  
Council/PH Zoning  
Committee  
Agenda Item Bill25  
Your position on the matter Support  
Representing Self  
Organization  
Do you wish to speak at the hearing? No

Written  
Testimony

I own an electric vehicle and don't have a charger at my apartment. I drive around constantly looking for available chargers and they are frequently all occupied. While free chargers are great, we need more paid charging stations. There was great incentive for people to buy electric cars but now no infrastructure to support them. Please make more chargers available!! I had to drive around for an hour on almost empty charge this weekend to find an available one in town.

Testimony  
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



**HAWAII LABORERS-EMPLOYERS COOPERATION AND EDUCATION TRUST**

650 Iwilei Road, Suite 285 · Honolulu, HI 96817 · Phone: 808-845-3238 · Fax: 808-845-8300

**January 21, 2020**

**HONOLULU CITY COUNCIL  
Committee on Zoning, Planning and Housing  
City Council Committee Meeting Room  
Honolulu, Hawaii 96813  
DATE: Thursday, January 23, 2020  
TIME: 10:00 a.m.**

**TESTIMONY ON BILL NO. 25 CD1 (2019) – Relating to the Adoption of the State Energy Code**

**To Council Chair Menor, Vice Chair Waters and members of the Committee on Zoning, Planning and Housing:**

Hawaii LECET is a labor-management partnership between the Hawaii Laborers' International Union of North America, Local 368, its' 5000+ members and its' 250+ unionized contractors. The Laborers' International Union of North America is the largest construction union in the United States.

Mahalo for the opportunity to testify. Hawaii LECET supports the intent of Bill No. 25 CD1 – Relating to the Adoption of the State Energy Code, but understands that the Honolulu City Administration has put forward a CD2 version. Hawaii LECET supports Bill 25 CD2 as it includes concrete masonry and concrete walls in the building code, which will improve on the standpoints of energy efficiency and fire safety. The sustainability and safety benefits of mass wall construction are recognized in the revisions of the State Building Codes, and including these revisions will create codes that are tailored to Hawaii's unique climate, resulting in greater energy efficiency and cost savings.

With respect,

Hawaii Laborers-Employers Cooperation & Education Trust